E-9-22
Certified:

Filed with the Clerk of the Nassau County Legislature on February 23, 2022 9:16am

NIFS ID:CLPW21000042 Department: Public Works

Capital: X

SERVICE: Amendment #1 S35121-03C Bay Park Raw Sewage Pumps

Contract ID #:CFPW15000058 NIFS Entry Date: 22-DEC-21 Term: from 01-JAN-22 to 31-DEC-23

Amendment
Time Extension: X
Addl. Funds:
Blanket Resolution:
RES#

1) Mandated Program:	Y
2) Comptroller Approval Form Attached:	Y
3) CSEA Agmt. § 32 Compliance Attached:	N
4) Material Adverse Information Identified? (if yes, attach memo):	N
5) Insurance Required	Y

Vendor Info:	
Name: **AECOM USA, Inc.**	Vendor ID#: **13-5511947**
Address: 200 Broadhollow Road Suite 207 Melville, NY 11747	Contact Person: Robert Orlin
	Phone: 212-973-2900

Department:
Contact Name: Vinny Falkowski
Address: NCDPW 3340 Merrick Road Building R, 3rd Floor Wantagh, NY 11793
Phone: 516-571-7515

Routing Slip

Department	**NIFS Entry: X**	**23-DEC-21 -- EKOBEL**
Department	**NIFS Approval: X**	**23-DEC-21 -- RD'ALLEVA**
DPW	**Capital Fund Approved: X**	**23-DEC-21 -- RDALLEVA**
OMB	**NIFA Approval: X**	**03-JAN-22 -- IQURESHI**
OMB	**NIFS Approval: X**	**27-DEC-21 -- NGUMIENIAK**
County Atty.	**Insurance Verification: X**	**23-DEC-21 -- DGREGWARE**

County Atty.	**Approval to Form: X**	**23-DEC-21 -- DGREGWARE**
CPO	**Approval: X**	**05-JAN-22 -- RCLEARY**
DCEC	**Approval: X**	**05-JAN-22 -- RCLEARY**
Dep. CE	**Approval: X**	**22-FEB-22 -- EPOWERS**
Leg. Affairs	**Approval/Review: X**	**22-FEB-22 -- CLEIMONE**
Legislature	**Approval:**	
Comptroller	**Deputy:**	
NIFA	**NIFA Approval:**	

Contract Summary

Purpose: Approval of an Amendment to a Personal Service Agreement with AECOM USA, Inc. to provide design-related construction and O&M services in connection with the Bay Park Raw Sewage Pumping Facility Improvements for two (2) years.
Method of Procurement: Qualification Based Selection (QBS) procedure for the procurement of professional services, developed in accordance with procedures stipulated in the Board of Supervisor's Resolution 928-1993 and the County Executive Order No. 1-1993.
Procurement History: The Request for Proposals (RFP) was prepared in accordance with the Department's policy for assessing technical understanding, statement of qualifications and proposed project schedule. The RFP was posted on the County's website and advertised in Newsday. Proposals were received from four (4) firms on March 27, 2015. The technical proposals were evaluated by professionals from within the Department of Public Works. Following the review, the technical rank was established and the cost proposals were reviewed. The proposal submitted by AECOM having the highest technical rating and a reasonable cost, represents the best value to the County.
Description of General Provisions: The Amendment will provide services for the Department that is design-related construction which encompasses product submittal reviews, coordination of job progress, operation and maintenance manuals, facility start-up, staffing and training and final certification of successful completion.
Impact on Funding / Price Analysis: No Additional Funding Requested.
Change in Contract from Prior Procurement: Extension of Time Only.
Recommendation: (approve as submitted) Approve as Submitted.

Advisement Information

BUDGET CODES	
Fund:	CSW
Control:	**35**
Resp:	**121**
Object:	**00002**
Transaction:	**CL**
Project #:	**35121**
Detail:	**SAN003**

RENEWAL	
% Increase	
%	

FUNDING SOURCE	AMOUNT
Revenue Contract:	
County	$ 0.00
Federal	$ 0.00
State	$ 0.00
Capital	$ 0.01
Other	$ 0.00
TOTAL	$ **0.01**

LINE	INDEX/OBJECT CODE	AMOUNT
2	PWCSWCSW/35121/00002	$ 0.01
		$ 0.00
		$ 0.00
		$ 0.00
		$ 0.00
		$ 0.00
	TOTAL	$ 0.01

Decrease		

RULES RESOLUTION NO. – 2022

A RESOLUTION AUTHORIZING THE COUNTY EXECUTIVE TO EXECUTE AN AMENDMENT TO A PERSONAL SERVICES AGREEMENT BETWEEN THE COUNTY OF NASSAU, ACTING ON BEHALF OF THE COUNTY DEPARTMENT OF PUBLIC WORKS, AND AECOM USA, INC.

WHEREAS, the County has negotiated an amendment to a personal services agreement with AECOM USA, Inc. in connection with design services for improvements to the Raw Sewage Pumping Facility at the Bay Park Sewage Treatment Plant, a copy of which is on file with the Clerk of the Legislature; now, therefore, be it

RESOLVED, that the Rules Committee of the Nassau County Legislature authorizes the County Executive to execute the said amendment to an agreement with AECOM USA, Inc.

AMENDMENT NO. 1

THIS AMENDMENT No.1 (this "Amendment"), dated as of the date this Amendment is executed by the County of Nassau, between (i) Nassau County, a municipal corporation having its principal office at 1550 Franklin Avenue, Mineola, New York 11501 (the "County"), acting of behalf of the Department of Public Works having its principal office at 1194 Prospect Avenue, Westbury, New York 11590 and (ii) AECOM USA, Inc. having its principal office at 200 Broadhollow Road, Suite 207, Melville, NY 11747 (the "Firm").

WITNESSETH:

WHEREAS, pursuant to County contract number S35121-03C between the County and the Firm, executed on behalf of the County on February 3, 2016 (the "Original Agreement"), the Firm performed certain services for the County in connection with Design Services, which services are more fully described in the Original Agreement (the services contemplated by the Original Agreement, the "Services");

WHEREAS, the term of the Original Agreement was from February 3, 2016 through December 31, 2019 (the "Original Term"); through notice of extension the term of the agreement was extended to December 31, 2021 ("Extended Term").

WHEREAS, the County and the Firm desire to amend the Extended Term of the Agreement to reflect the agreement of the parties with respect to the maters addressed in this Amendment.

NOW, THEREFORE, in consideration of the premises and mutual covenants contained in this Amendment, the parties agree as follows:

1. Amended Term. The Extended Term shall be extended by twenty-four (24) months so that the termination of the Agreement, as amended by this amendment (the "Amended Agreement") shall be December 31, 2023. The Department, in its sole discretion, shall have the right to extend this Agreement one (1) year on up to two (2) occasions, delivering a notice of extension to the Firm at least thirty (30) days prior to the Expiration Date.

2. Compliance with Law.

(a) Prohibition of Gifts. In accordance with County Executive Order 2-2018, the Contractor shall not offer, give, or agree to give anything of value to any County employee, agent, consultant, construction manager, or other person or firm representing the County (a "County Representative"), including members of a County Representative's immediate family, in connection with the performance by such County Representative of duties involving transactions with the Contractor on behalf of the County, whether such duties are related to this Agreement or any other County contract or matter. As used herein, "anything of value" shall include, but not be limited to, meals, holiday gifts, holiday

baskets, gift cards, tickets to golf outings, tickets to sporting events, currency of any kind, or any other gifts, gratuities, favorable opportunities or preferences. For purposes of this subsection, an immediate family member shall include a spouse, child, parent, or sibling. The Contractor shall include the provisions of this subsection in each subcontract entered into under this Agreement.

(b) Disclosure of Conflicts of Interest. In accordance with County Executive Order 2-2018, the Contractor has disclosed as part of its response to the County's Business History Form, or other disclosure form(s), any and all instances where the Contractor employs any spouse, child, or parent of a County employee of the agency or department that contracted or procured the goods and/or services described under this Agreement. The Contractor shall have a continuing obligation, as circumstances arise, to update this disclosure throughout the term of this Agreement.

(c) Vendor Code of Ethics. By executing this Agreement, the Contractor hereby certifies and covenants that:

(i) The Contractor has been provided a copy of the Nassau County Vendor Code of Ethics issued on June 5, 2019, as may be amended from time to time (the "Vendor Code of Ethics"), and will comply with all of its provisions;

(ii) All of the Contractor's Participating Employees, as such term is defined in the Vendor Code of Ethics (the "Participating Employees"), have been provided a copy of the Vendor Code of Ethics prior to their participation in the underlying procurement;

(iii) All Participating Employees have completed the acknowledgment required by the Vendor Code of Ethics;

(iv) The Contractor will retain all of the signed Participating Employee acknowledgements for the period it is required to retain other records pertinent to performance under this Agreement;

(v) The Contractor will continue to distribute the Vendor Code of Ethics, obtain signed Participating Employee acknowledgments as new Participating Employees are added or changed during the term of this Agreement, and retain such signed acknowledgments for the period the Contractor is required to retain other records pertinent to performance under this Agreement; and

The Contractor has obtained the certifications required by the Vendor Code of Ethics from any subcontractors or other lower tier participants who have participated in procurements for work performed under this Agreement.

3. Full Force and Effect. All the terms and conditions of the Original Agreement not expressly amended by this Amendment shall remain in full force and effect and govern the relationship of the parties for the term of the Amended Agreement.

IN WITNESS WHEREOF, the parties have executed this Amendment as of the date first above written.

AECOM USA, Inc.

By: _____
Name: Paul Storella
Title: Senior Vice President
Date: 7/14/21

NASSAU COUNTY

By: _____
Name: _____
Title: County Executive
Deputy County Executive
Date: _____

PLEASE EXECUTE IN BLUE INK

STATE OF NEW YORK)
)ss.:
COUNTY OF NASSAU)

On the 14 day of July in the year 2021 before me personally came Paul Storella to me personally known, who, being by me duly sworn, did depose and say that he or she resides in the County of Nassau; that he or she is the Sr. Vice President of AECOM, the corporation described herein and which executed the above instrument; and that he or she signed his or her name thereto by authority of the board of directors of said corporation.

NOTARY PUBLIC

MARIAN RUIZ
Notary Public, State of New York
No. 01RU6416252
Qualified in New York County
Commission Expires April 12, 2025

STATE OF NEW YORK)
)ss.:
COUNTY OF NASSAU)

On the ____ day of _____ in the year 202_ before me personally came _____ to me personally known, who, being by me duly sworn, did depose and say that he or she resides in the County of _____; that he or she is County Executive of the County of Nassau, the municipal corporation described herein and which executed the above instrument; and that he or she signed his or her name thereto pursuant to Section 205 of the County Government Law of Nassau County.

NOTARY PUBLIC

APPENDIX "L"

Certificate of Compliance

In compliance with Local Law 1-2006, as amended (the "Law"), the Contractor hereby certifies the following:

1. The chief executive officer of the Contractor is:

   Frederick Werner _____ (Name)

   605 Third Ave, New York, NY 10158 _____ (Address)

   212-973-2900 _____ (Telephone Number)

2. The Contractor agrees to either (1) comply with the requirements of the Nassau County Living Wage Law or (2) as applicable, obtain a waiver of the requirements of the Law pursuant to section 9 of the Law. In the event that the contractor does not comply with the requirements of the Law or obtain a waiver of the requirements of the Law, and such contractor establishes to the satisfaction of the Department that at the time of execution of this agreement, it had a reasonable certainty that it would receive such waiver based on the Law and Rules pertaining to waivers, the County will agree to terminate the contract without imposing costs or seeking damages against the Contractor

3. In the past five years, Contractor ___ has X has not been found by a court or a government agency to have violated federal, state, or local laws regulating payment of wages or benefits, labor relations, or occupational safety and health. If a violation has been assessed against the Contractor, describe below:

   _____

   _____

   _____

   _____

   _____

   _____

   _____

   _____

4. In the past five years, an administrative proceeding, investigation, or government body-initiated judicial action has XXXX has not been commenced against or relating to the Contractor in connection with federal, state, or local laws regulating payment of wages or benefits, labor relations, or occupational safety and health. If such a proceeding, action, or investigation has been commenced, describe below:

   _____

   _____

   _____

   _____

   _____

5. Contractor agrees to permit access to work sites and relevant payroll records by authorized County representatives for the purpose of monitoring compliance with the Living Wage Law and investigating employee complaints of noncompliance.

I hereby certify that I have read the foregoing statement and, to the best of my knowledge and belief, it is true, correct and complete. Any statement or representation made herein shall be accurate and true as of the date stated below.

December 17, 2021
Dated

Signature of ~~Chief Executive Officer~~ VP & Secretary

Robert Orlin
Name of ~~Chief Executive Officer~~ VP & Secretary

Sworn to before me this
17th day of December, 2021

Notary Public

RUSSELL L. HIRSCHHORN
Notary Public, State of New York
No. 02HI6144589
Qualified in Suffolk County
Commission Expires April 24, 2022

NIFA Nassau County Interim Finance Authority

Contract Approval Request Form (As of January 1, 2015)

1. Vendor: AECOM USA, Inc.

2. Dollar amount requiring NIFA approval: $.01

Amount to be encumbered: $.01

This is a Amendment

If new contract - $ amount should be full amount of contract
If advisement ?NIFA only needs to review if it is increasing funds above the amount previously approved by NIFA
If amendment - $ amount should be full amount of amendment only

3. Contract Term: 2 years

Has work or services on this contract commenced? N

If yes, please explain:

4. Funding Source:

General Fund (GEN)
X Capital Improvement Fund (CAP)
Other

Grant Fund (GRT)

Federal % 0
State % 0
County % 0

Is the cash available for the full amount of the contract?	Y
If not, will it require a future borrowing?	N
Has the County Legislature approved the borrowing?	N/A
Has NIFA approved the borrowing for this contract?	N/A

5. Provide a brief description (4 to 5 sentences) of the item for which this approval is requested:

Approval of an Amendment to a Personal Service Agreement with AECOM USA, Inc. to provide design-related construction and O&M services in connection with the Bay Park Raw Sewage Pumping Facility Improvements for two (2) years.

6. Has the item requested herein followed all proper procedures and thereby approved by the:

Nassau County Attorney as to form

Nassau County Committee and/or Legislature

Date of approval(s) and citation to the resolution where approval for this item was provided:

7. Identify all contracts (with dollar amounts) with this or an affiliated party within the prior 12 months:

Contract ID	Date	Amount

AUTHORIZATION

To the best of my knowledge, I hereby certify that the information contained in this Contract Approv al Request Form and any additional information submitted in connection with this request is true an d accurate and that all expenditures that will be made in reliance on this authorization are in confor mance with the Nassau County Approved Budget and not in conflict with the Nassau County Multi-Year Financial Plan. I understand that NIFA will rely upon this information in its official deliberation s.

IQURESHI 03-JAN-22

Authenticated User ***Date***

COMPTROLLER'S OFFICE

To the best of my knowledge, I hereby certify that the information listed is true and accurate and is in conformance with the Nassau County Approved Budget and not in conflict with the Nassau Cou nty Multi-Year Financial Plan.

Regarding funding, please check the correct response:

_ I certify that the funds are available to be encumbered pending NIFA approval of this contract.

If this is a capital project:

I certify that the bonding for this contract has been approved by NIFA.

Budget is available and funds have been encumbered but the project requires NIFA bonding authorization

Authenticated User ***Date***

NIFA

Amount being approved by NIFA: _

Payment is not guaranteed for any work commenced prior to this approval.

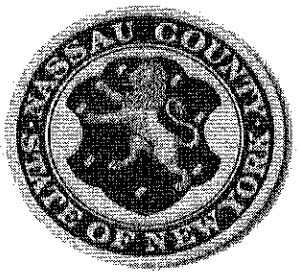
Authenticated User ***Date***

NOTE: All contract submissions MUST include the County's own routing slip, current NIFS pri ntouts for all relevant accounts and relevant Nassau County Legislature communication docu ments and relevant supplemental information pertaining to the item requested herein.

NIFA Contract Approval Request Form MUST be filled out in its entirety before being su bmitted to NIFA for review.

NIFA reserves the right to request additional information as needed.

Jack Schnirman
Comptroller



OFFICE OF THE COMPTROLLER
240 Old Country Road
Mineola, New York 11501

COMPTROLLER APPROVAL FORM FOR PERSONAL, PROFESSIONAL OR HUMAN SERVICES CONTRACTS

Attach this form along with all personal, professional or human services contracts, contract renewals, extensions and amendments.

CONTRACTOR NAME: AECOM USA, Inc.

CONTRACTOR ADDRESS: 200 Broadhollow Road, Suite 207, Melville, NY 11747

FEDERAL TAX ID #: 13-5511947

Instructions: **Please check the appropriate box ("☑") after one of the following roman numerals, and provide all the requested information.**

I. ☐ The contract was awarded to the lowest, responsible bidder after advertisement for sealed bids. The contract was awarded after a request for sealed bids was published in_____ [newspaper] on _____ [date]. The sealed bids were publicly opened on _____ [date]. _____ [#] of sealed bids were received and opened.

II. ☐ The contractor was selected pursuant to a Request for Proposals.
The Contract was entered into after a written request for proposals was issued on _____ [date]. Potential proposers were made aware of the availability of the RFP by advertisement in _____ [newspaper], posting on industry websites, via email to interested parties and by publication on the County procurement website. Proposals were due on _____ [date]. _____ [state #] proposals were received and evaluated. The evaluation committee consisted of: _____
_____
_____ (list # of persons on committee and their respective departments). The proposals were scored and ranked. As a result of the scoring and ranking, the highest-ranking proposer was selected.

III. ☑ This is a renewal, extension or amendment of an existing contract.
The contract was originally executed by Nassau County on Feb 3, 2016 [date]. This is a renewal or extension pursuant to the contract, or an amendment within the scope of the contract or RFP (copies of the relevant pages are attached). The original contract was entered into after the RFP was advertised and AECOM's proposal was selected from among five (5) submitted based on having the highest rating proposal with reasonable design fee was selected as the best value to the County. [describe procurement method, i.e., RFP, three proposals evaluated, etc.] Attach a copy of the most recent evaluation of the contractor's performance for any contract to be renewed or extended. If the contractor has not received a satisfactory evaluation, the department must explain why the contractor should nevertheless be permitted to continue to contract with the county.

IV. ☐ Pursuant to Executive Order No. 1 of 1993, as amended, at least three proposals were solicited and received. The attached memorandum from the department head describes the proposals received, along with the cost of each proposal.

☐ **A.** The contract has been awarded to the proposer offering the lowest cost proposal; **OR:**

☐ **B.** The attached memorandum contains a detailed explanation as to the reason(s) why the contract was awarded to other than the lowest-cost proposer. The attachment includes a specific delineation of the unique skills and experience, the specific reasons why a proposal is deemed superior, and/or why the proposer has been judged to be able to perform more quickly than other proposers.

V. ☐ Pursuant to Executive Order No. 1 of 1993 as amended, the attached memorandum from the department head explains why the department did not obtain at least three proposals.

☐ **A.** There are only one or two providers of the services sought or less than three providers submitted proposals. The memorandum describes how the contractor was determined to be the sole source provider of the personal service needed or explains why only two proposals could be obtained. If two proposals were obtained, the memorandum explains that the contract was awarded to the lowest cost proposer, or why the selected proposer offered the higher quality proposal, the proposer's unique and special experience, skill, or expertise, or its availability to perform in the most immediate and timely manner.

☐ **B.** The memorandum explains that the contractor's selection was dictated by the terms of a federal or New York State grant, by legislation or by a court order. (Copies of the relevant documents are attached).

☐ **C.** Pursuant to General Municipal Law Section 104, the department is purchasing the services required through a New York State Office of General Services contract no._____, and the attached memorandum explains how the purchase is within the scope of the terms of that contract.

☐ **D.** Pursuant to General Municipal Law Section 119-o, the department is purchasing the services required through an inter-municipal agreement.

VI. ☐ This is a human services contract with a not-for-profit agency for which a competitive process has not been initiated. Attached is a memorandum that explains the reasons for entering into this contract without conducting a competitive process, and details when the department intends to initiate a competitive process for the future award of these services. For any such contract, where the vendor has previously provided services to the county, attach a copy of the most recent evaluation of the vendor's performance. If the contractor has not received a satisfactory evaluation, the department must explain why the contractor should nevertheless be permitted to contract with the county.

In certain limited circumstances, conducting a competitive process and/or completing performance evaluations may not be possible because of the nature of the human services program, or because of a compelling need to continue services through the same provider. In those circumstances, attach an explanation of why a competitive process and/or performance evaluation is inapplicable.

VII. ☐ This is a public works contract for the provision of architectural, engineering or surveying services. The attached memorandum provides details of the department's compliance with Board of Supervisors' Resolution No. 928 of 1993, including its receipt and evaluation of annual Statements of Qualifications & Performance Data, and its negotiations with the most highly qualified firms.

Instructions with respect to Sections VIII, IX and X: **All Departments must check the box for VIII. Then, check the box for either IX or X, as applicable.**

VIII. ☑ Participation of Minority Group Members and Women in Nassau County Contracts. The selected contractor has agreed that it has an obligation to utilize best efforts to hire MWBE sub-contractors. Proof of the contractual utilization of best efforts as outlined in Exhibit "EE" may be requested at any time, from time to time, by the Comptroller's Office prior to the approval of claim vouchers.

IX. ☑ Department MWBE responsibilities. To ensure compliance with MWBE requirements as outlined in Exhibit "EE", Department will require vendor to submit list of sub-contractor requirements prior to submission of the first claim voucher, for services under this contract being submitted to the Comptroller.

X. ☐ Vendor will not require any sub-contractors.

In addition, if this is a contract with an individual or with an entity that has only one or two employees: ☐ a review of the criteria set forth by the Internal Revenue Service, *Revenue Ruling No.* 87-41, 1987-1 C.B. 296, attached as Appendix A to the Comptroller's Memorandum, dated February 13, 2004, concerning independent contractors and employees indicates that the contractor would not be considered an employee for federal tax purposes.

Roseann Dalleva

Department Head Signature

12/19/2021

Date

NOTE: ***Any information requested above, or in the exhibit below, may be included in the county's "staff summary" form in lieu of a separate memorandum.***

Certificate of No Change Form

All fields must be filled.

A materially false statement willfully or fraudulently made in connection with this certification, and/or the failure to conduct appropriate due diligence in verifying the information that is the subject of this certification, may result in rendering the submitting entity non-responsible for the purpose of contract award.

A materially false statement willfully or fraudulently made in connection with this certification may subject the person making the false statement to criminal charges.

I, Robert Orlin state that I have read and understand all the items contained in the disclosure documents listed below and certify that as of this date, these items have not changed. I further certify that, to the best of my knowledge, information and belief, those answers are full, complete, and accurate; and that, to the best of my knowledge, information, and belief, those answers continue to be full, complete, and accurate.

In addition, I further certify on behalf of the submitting vendor that the information contained in the principal questionnaire(s) have not changed and have been verified and continue, to the best of my knowledge, to be full, complete and accurate.

I understand that Nassau County will rely on the information supplied in this certification as additional inducement to enter into a contract with the submitting entity.

Vendor Disclosures

This refers to the vendor integrity and disclosure forms submitted for the vendor doing business with the County.

Name of Submitting Entity: AECOM USA, Inc.

Vendor's Address: 605 Third Ave New York NY US 10158

Vendor's EIN or TIN: 135511947

Forms Submitted:

Political Campaign Contribution Disclosure Form:
09/30/2021 03:46:58 PM

Lobbyist Registration and Disclosure Form:
10/05/2021 04:06:46 PM

Business History Form certified:
09/20/2021 09:53:18 AM

Consultant's, Contractor's, and Vendor's Disclosure Form:
09/30/2021 03:50:38 PM

Principal Questionnaire(s)

This refers to the most recent principal questionnaire submissions.

Principal Name	Date Certified
John Cardoni [JOHN.CARDONI@AECOM.COM]	09/30/2021 05:50:05 PM
fred werner [FRED.WERNER@AECOM.COM]	09/30/2021 04:07:10 PM
Robert Orlin [ROBERT.ORLIN@AECOM.COM]	09/30/2021 03:48:46 PM
VISHNU RAMLAGAN [VISHNU.RAMLAGAN@AECOM.COM]	10/04/2021 10:19:20 AM

I, Robert Orlin hereby acknowledge that a materially false statement willfully or fraudulently made in connection with this form may result in rendering the submitting business entity and/or any affiliated entities non-responsible, and, in addition, may subject me to criminal charges.

I further certify that I have read and understand all the items contained in this form; that I supplied full and complete answers to each item therein to the best of my knowledge, information and belief; that I will notify the County in writing of any change in circumstances occurring after the submission of this form; and that all information supplied by me is true to the best of my knowledge, information and belief. I understand that the County will rely on the information supplied in this form as additional inducement to enter into a contract with the submitting business entity

CERTIFICATION

A MATERIALLY FALSE STATEMENT WILLFULLY OR FRAUDULENTLY MADE IN CONNECTION WITH THIS QUESTIONNAIRE MAY RESULT IN RENDERING THE SUBMITTING BUSINESS ENTITY NOT RESPONSIBLE WITH RESPECT TO THE PRESENT BID OR FUTURE BIDS, AND, IN ADDITION, MAY SUBJECT THE PERSON MAKING THE FALSE STATEMENT TO CRIMINAL CHARGES."

Robert Orlin ROBERT.ORLIN@AECOM.COM

Name

VP & Secretary

Title

AECOM USA, Inc.

Name of Submitting Entity

10/05/2021 04:13:04 PM

Date

COUNTY OF NASSAU

POLITICAL CAMPAIGN CONTRIBUTION DISCLOSURE FORM

1. Has the vendor or any corporate officers of the vendor provided campaign contributions pursuant to the New York State Election Law in (a) the period beginning April 1, 2016 and ending on the date of this disclosure, or (b), beginning April 1, 2018, the period beginning two years prior to the date of this disclosure and ending on the date of this disclosure, to the campaign committees of any of the following Nassau County elected officials or to the campaign committees of any candidates for any of the following Nassau County elected offices: the County Executive, the County Clerk, the Comptroller, the District Attorney, or any County Legislator?

YES		NO	X	If yes, to what campaign committee?

2. VERIFICATION: This section must be signed by a principal of the consultant, contractor or Vendor authorized as a signatory of the firm for the purpose of executing Contracts.

The undersigned affirms and so swears that he/she has read and understood the foregoing statements and they are, to his/her knowledge, true and accurate.

The undersigned further certifies and affirms that the contribution(s) to the campaign committees identified above were made freely and without duress, threat or any promise of a governmental benefit or in exchange for any benefit or remuneration.

Electronically signed and certified at the date and time indicated by:
Robert Orlin [ROBERT.ORLIN@AECOM.COM]

Dated: 09/30/2021 03:46:58 PM

Vendor: AECOM USA, Inc.

Title: VP & Secretary

Rev. 3-2016

COUNTY OF NASSAU

LOBBYIST REGISTRATION AND DISCLOSURE FORM

1. Name, address and telephone number of lobbyist(s)/lobbying organization. The term "lobbyist" means any and every person or organization retained, employed or designated by any client to influence - or promote a matter before - Nassau County, its agencies, boards, commissions, department heads, legislators or committees, including but not limited to the Open Space and Parks Advisory Committee and Planning Commission. Such matters include, but are not limited to, requests for proposals, development or improvement of real property subject to County regulation, procurements. The term "lobbyist" does not include any officer, director, trustee, employee, counsel or agent of the County of Nassau, or State of New York, when discharging his or her official duties.

None

2. List whether and where the person/organization is registered as a lobbyist (e.g., Nassau County, New York State):

None

3. Name, address and telephone number of client(s) by whom, or on whose behalf, the lobbyist is retained, employed or designated:

None

4. Describe lobbying activity conducted, or to be conducted, in Nassau County, and identify client(s) for each activity listed. See the last page for a complete description of lobbying activities.

None

5. The name of persons, organizations or governmental entities before whom the lobbyist expects to lobby:

N/A

6. If such lobbyist is retained or employed pursuant to a written agreement of retainer or employment, you must attach a copy of such document; and if agreement of retainer or employment is oral, attach a written statement of the substance thereof. If the written agreement of retainer or employment does not contain a signed authorization from the client by whom you have been authorized to lobby. separately attach such a written authorization from the client.

7. Has the lobbyist/lobbying organization or any of its corporate officers provided campaign contributions pursuant to the New York State Election Law in (a) the period beginning April 1, 2016 and ending on the date of this disclosure, or (b), beginning April 1, 2018, the period beginning two years prior to the date of this disclosure and ending on the date of this disclosure, to the campaign committees of any of the following Nassau County elected officials or to the campaign committees of any candidates for any of the following Nassau County elected offices: the County Executive, the County Clerk, the Comptroller, the District Attorney, or any County Legislator?

YES [ ] NO [X] If yes, to what campaign committee? If none, you must so state:

I understand that copies of this form will be sent to the Nassau County Department of Information Technology ("IT") to be posted on the County's website.

I also understand that upon termination of retainer, employment or designation I must give written notice to the County Attorney within thirty (30) days of termination.

VERIFICATION: The undersigned affirms and so swears that he/she has read and understood the foregoing statements and they are, to his/her knowledge, true and accurate.

The undersigned further certifies and affirms that the contribution(s) to the campaign committees listed above were made freely and without duress. threat or any promise of a governmental benefit or in exchange for any benefit or remuneration.

Electronically signed and certified at the date and time indicated by:
Robert Orlin [ROBERT.ORLIN@AECOM.COM]

Dated: 10/05/2021 04:06:46 PM

Vendor: AECOM USA, Inc.

Title: VP & Secretary

The term <u>lobbying</u> shall mean any attempt to influence: any determination made by the Nassau County Legislature, or any member thereof, with respect to the introduction, passage, defeat, or substance of any local legislation or resolution; any determination by the County Executive to support, oppose, approve or disapprove any local legislation or resolution, whether or not such legislation has been introduced in the County Legislature; any determination by an elected County official or an officer or employee of the County with respect to the procurement of goods, services or construction, including the preparation of contract specifications, including by not limited to the preparation of requests for proposals, or solicitation, award or administration of a contract or with respect to the solicitation, award or administration of a grant, loan, or agreement involving the disbursement of public monies; any determination made by the County Executive, County Legislature, or by the County of Nassau, its agencies, boards, commissions department heads or committees, including but not limited to the Open Space and Parks Advisory Committee, the Planning Commission with respect to the zoning, use, development or improvement of real property subject to County regulation, or any agencies, boards, commissions, department heads or committees with respect to requests for proposals, bidding, procurement or contracting for services for the County; any determination made by an elected county official or an officer or employee of the county with respect to the terms of the acquisition or disposition by the county of any interest in real property, with respect to a license or permit for the use of real property of or by the county, or with respect to a franchise, concession or revocable consent; the proposal, adoption, amendment or rejection by an agency of any rule having the force and effect of law; the decision to hold, timing or outcome of any rate making proceeding before an agency; the agenda or any determination of a board or commission; any determination regarding the calendaring or scope of any legislature oversight hearing; the issuance, repeal, modification or substance of a County Executive Order; or any determination made by an elected county official or an officer or employee of the county to support or oppose any state or federal legislation, rule or regulation, including any determination made to support or oppose that is contingent on any amendment of such legislation, rule or regulation, whether or not such legislation has been formally introduced and whether or not such rule or regulation has been formally proposed.

The term "lobbying" or "lobbying activities" <u>does not include:</u> Persons engaged in drafting legislation, rules, regulations or rates; persons advising clients and rendering opinions on proposed legislation, rules, regulations or rates, where such professional services are not otherwise connected with legislative or executive action on such legislation or administrative action on such rules, regulations or rates; newspapers and other periodicals and radio and television stations and owners and employees thereof, provided that their activities in connection with proposed legislation, rules, regulations or rates are limited to the publication or broadcast of news items, editorials or other comment, or paid advertisements; persons who participate as witnesses. attorneys or other representatives in public rule-making or rate-making proceedings of a County agency, with respect to all participation by such persons which is part of the public record thereof and all preparation by such persons for such participation; persons who attempt to influence a County agency in an adjudicatory proceeding, as defined by § 102 of the New York State Administrative Procedure Act.

PRINCIPAL QUESTIONNAIRE FORM

All questions on these questionnaires must be answered by all officers and any individuals who hold a ten percent (10%) or greater ownership interest in the proposer. Answers typewritten or printed in ink. If you need more space to answer any question, make as many photocopies of the appropriate page(s) as necessary and attach them to the questionnaire.

COMPLETE THIS QUESTIONNAIRE CAREFULLY AND COMPLETELY. FAILURE TO SUBMIT A COMPLETE QUESTIONNAIRE MAY MEAN THAT YOUR BID OR PROPOSAL WILL BE REJECTED AS NON-RESPONSIVE AND IT WILL NOT BE CONSIDERED FOR AWARD

1. Principal Name: Frederick Werner
Date of birth:
Home address:
City: State/Province/Territory: Zip/Postal Code:
Country: US

Business Address: 605 third avenue
City: new york State/Province/Territory: NY Zip/Postal Code: 10158
Country US
Telephone: (212) 973-2900

Other present address(es):
City: State/Province/Territory: Zip/Postal Code:
Country:
Telephone:

List of other addresses and telephone numbers attached

2. Positions held in submitting business and starting date of each (check all applicable)

President		Treasurer	
Chairman of Board		Shareholder	
Chief Exec. Officer	10/01/2015	Secretary	
Chief Financial Officer		Partner	
Vice President			
(Other)			

3. Do you have an equity interest in the business submitting the questionnaire?
YES [ ] NO [X] If Yes, provide details.

4. Are there any outstanding loans, guarantees or any other form of security or lease or any other type of contribution made in whole or in part between you and the business submitting the questionnaire?
YES [ ] NO [X] If Yes, provide details.

5. Within the past 3 years, have you been a principal owner or officer of any business or notfor-profit organization other than the one submitting the questionnaire?
YES [X] NO [ ] If Yes, provide details.
see attached

1 File(s) Uploaded: D_Principal Questionnarie_Werner (003).pdf

6. Has any governmental entity awarded any contracts to a business or organization listed in Section 5 in the past 3 years while you were a principal owner or officer?

YES [X] NO [ ] If Yes, provide details.

The entities listed in Section 5 are all AECOM owned entities, many of which contract with government clients.

1 File(s) Uploaded: D_Principal Questionnarie_Werner (003).pdf

NOTE: An affirmative answer is required below whether the sanction arose automatically, by operation of law, or as a result of any action taken by a government agency. Provide a detailed response to all questions checked "YES". If you need more space, photocopy the appropriate page and attach it to the questionnaire.

7. In the past (5) years, have you and/or any affiliated businesses or not-for-profit organizations listed in Section 5 in which you have been a principal owner or officer:

a. Been debarred by any government agency from entering into contracts with that agency?

YES [ ] NO [X] If yes, provide an explanation of the circumstances and corrective action taken.

b. Been declared in default and/or terminated for cause on any contract, and/or had any contracts cancelled for cause?

YES [ ] NO [X] If yes, provide an explanation of the circumstances and corrective action taken.

c. Been denied the award of a contract and/or the opportunity to bid on a contract, including, but not limited to, failure to meet pre-qualification standards?

YES [ ] NO [X] If yes, provide an explanation of the circumstances and corrective action taken.

d. Been suspended by any government agency from entering into any contract with it; and/or is any action pending that could formally debar or otherwise affect such business's ability to bid or propose on contract?

YES [ ] NO [X] If yes, provide an explanation of the circumstances and corrective action taken.

8. Have any of the businesses or organizations listed in response to Question 5 filed a bankruptcy petition and/or been the subject of involuntary bankruptcy proceedings during the past 7 years, and/or for any portion of the last 7 year period, been in a state of bankruptcy as a result of bankruptcy proceedings initiated more than 7 years ago and/or is any such business now the subject of any pending bankruptcy proceedings, whenever initiated?

YES [ ] NO [X] If 'Yes', provide details for each such instance. (Provide a detailed response to all questions check "Yes". If you need more space, photocopy the appropriate page and attached it to the questionnaire.)

9.

a. Is there any felony charge pending against you?
YES [ ] NO [X] If yes, provide an explanation of the circumstances and corrective action taken.

b. Is there any misdemeanor charge pending against you?
YES [ ] NO [X] If yes, provide an explanation of the circumstances and corrective action taken.

c. Is there any administrative charge pending against you?
YES [ ] NO [X] If yes, provide an explanation of the circumstances and corrective action taken.

d. In the past 10 years, have you been convicted, after trial or by plea, of any felony, or of any other crime, an element of which relates to truthfulness or the underlying facts of which related to the conduct of business? Y
YES [ ] NO [X] If yes, provide an explanation of the circumstances and corrective action taken.

e. In the past 5 years, have you been convicted, after trial or by plea, of a misdemeanor?
YES [ ] NO [X] If yes, provide an explanation of the circumstances and corrective action taken.

f. In the past 5 years, have you been found in violation of any administrative or statutory charges?
YES [ ] NO [X] If yes, provide an explanation of the circumstances and corrective action taken.

10. In addition to the information provided in response to the previous questions, in the past 5 years, have you been the subject of a criminal investigation and/or a civil anti-trust investigation by any federal, state or local prosecuting or investigative agency and/or the subject of an investigation where such investigation was related to activities performed at, for, or on behalf of the submitting business entity and/or an affiliated business listed in response to Question 5?

YES [ ] NO [X] If yes, provide an explanation of the circumstances and corrective action taken.

11. In addition to the information provided, in the past 5 years has any business or organization listed in response to Question 5, been the subject of a criminal investigation and/or a civil anti-trust investigation and/or any other type of investigation by any government agency, including but not limited to federal, state, and local regulatory agencies while you were a principal owner or officer?
YES [ ] NO [X] If yes, provide an explanation of the circumstances and corrective action taken.

12. In the past 5 years, have you or this business, or any other affiliated business listed in response to Question 5 had any sanction imposed as a result of judicial or administrative proceedings with respect to any professional license held?
YES [ ] NO [X] If yes, provide an explanation of the circumstances and corrective action taken.

13. For the past 5 tax years, have you failed to file any required tax returns or failed to pay any applicable federal, state or local taxes or other assessed charges, including but not limited to water and sewer charges?
YES [ ] NO [X] If yes, provide an explanation of the circumstances and corrective action taken.

I, fred werner , hereby acknowledge that a materially false statement willfully or fraudulently made in connection with this form may result in rendering the submitting business entity and/or any affiliated entities non-responsible, and, in addition, may subject me to criminal charges.

I, fred werner , hereby certify that I have read and understand all the items contained in this form; that I supplied full and complete answers to each item therein to the best of my knowledge, information and belief; that I will notify the County in writing of any change in circumstances occurring after the submission of this form; and that all information supplied by me is true to the best of my knowledge, information and belief. I understand that the County will rely on the information supplied in this form as additional inducement to enter into a contract with the submitting business entity.

CERTIFICATION

A MATERIALLY FALSE STATEMENT WILLFULLY OR FRAUDULENTLY MADE IN CONNECTION WITH THIS QUESTIONNAIRE MAY RESULT IN RENDERING THE SUBMITTING BUSINESS ENTITY NOT RESPONSIBLE WITH RESPECT TO THE PRESENT BID OR FUTURE BIDS, AND, IN ADDITION, MAY SUBJECT THE PERSON MAKING THE FALSE STATEMENT TO CRIMINAL CHARGES.

aecom

Name of submitting business

Electronically signed and certified at the date and time indicated by:
fred werner [FRED.WERNER@AECOM.COM]

president

Title

09/30/2021 04:07:10 PM

Date

Question5

Redacted

PRINCIPAL QUESTIONNAIRE FORM

All questions on these questionnaires must be answered by all officers and any individuals who hold a ten percent (10%) or greater ownership interest in the proposer. Answers typewritten or printed in ink. If you need more space to answer any question, make as many photocopies of the appropriate page(s) as necessary and attach them to the questionnaire.

COMPLETE THIS QUESTIONNAIRE CAREFULLY AND COMPLETELY. FAILURE TO SUBMIT A COMPLETE QUESTIONNAIRE MAY MEAN THAT YOUR BID OR PROPOSAL WILL BE REJECTED AS NON-RESPONSIVE AND IT WILL NOT BE CONSIDERED FOR AWARD

1. Principal Name: John Cardoni
Date of birth:
Home address:
City: State/Province/Territory: Zip/Postal Code:
Country: US

Business Address: 605 Third Avenue
City: New York State/Province/Territory: NY Zip/Postal Code: 10158
Country US
Telephone: (212) 973-2900

Other present address(es): 250 Apollo Drive
City: Chelmsford State/Province/Territory: Zip/Postal Code: 01824
Country: US
Telephone:

List of other addresses and telephone numbers attached

2. Positions held in submitting business and starting date of each (check all applicable)

President	01/14/2019	Treasurer	
Chairman of Board		Shareholder	
Chief Exec. Officer		Secretary	
Chief Financial Officer		Partner	
Vice President			
(Other)			

Type	Description	Start Date
Other	Chief Operating Officer	01/14/2019

3. Do you have an equity interest in the business submitting the questionnaire?
YES [ ] NO [X] If Yes, provide details.

4. Are there any outstanding loans, guarantees or any other form of security or lease or any other type of contribution made in whole or in part between you and the business submitting the questionnaire?
YES [ ] NO [X] If Yes, provide details.

5. Within the past 3 years, have you been a principal owner or officer of any business or notfor-profit organization other than the one submitting the questionnaire?

YES [X] NO [ ] If Yes, provide details.

See attached file

2 File(s) Uploaded: John Cardoni Roles.pdf, John Cardoni Roles.pdf

6. Has any governmental entity awarded any contracts to a business or organization listed in Section 5 in the past 3 years while you were a principal owner or officer?

YES [X] NO [ ] If Yes, provide details.

The entities listed in Section 5 are all AECOM owned entities, many of which contract with government clients

NOTE: An affirmative answer is required below whether the sanction arose automatically, by operation of law, or as a result of any action taken by a government agency. Provide a detailed response to all questions checked "YES". If you need more space, photocopy the appropriate page and attach it to the questionnaire.

7. In the past (5) years, have you and/or any affiliated businesses or not-for-profit organizations listed in Section 5 in which you have been a principal owner or officer:

a. Been debarred by any government agency from entering into contracts with that agency?

YES [ ] NO [X] If yes, provide an explanation of the circumstances and corrective action taken.

b. Been declared in default and/or terminated for cause on any contract, and/or had any contracts cancelled for cause?

YES [X] NO [ ] If yes, provide an explanation of the circumstances and corrective action taken.

See attachment

1 File(s) Uploaded: Cardoni Q7b.pdf

c. Been denied the award of a contract and/or the opportunity to bid on a contract, including, but not limited to, failure to meet pre-qualification standards?

YES [X] NO [ ] If yes, provide an explanation of the circumstances and corrective action taken.

1 File(s) Uploaded: Q7c Cardoni.pdf

d. Been suspended by any government agency from entering into any contract with it; and/or is any action pending that could formally debar or otherwise affect such business's ability to bid or propose on contract?

YES [ ] NO [X] If yes, provide an explanation of the circumstances and corrective action taken.

8. Have any of the businesses or organizations listed in response to Question 5 filed a bankruptcy petition and/or been the subject of involuntary bankruptcy proceedings during the past 7 years, and/or for any portion of the last 7 year period, been in a state of bankruptcy as a result of bankruptcy proceedings initiated more than 7 years ago and/or is any such business now the subject of any pending bankruptcy proceedings, whenever initiated?

YES [ ] NO [X] If 'Yes', provide details for each such instance. (Provide a detailed response to all questions check "Yes". If you need more space, photocopy the appropriate page and attached it to the questionnaire.)

9.

a. Is there any felony charge pending against you?

YES [ ] NO [X] If yes, provide an explanation of the circumstances and corrective action taken.

b. Is there any misdemeanor charge pending against you?

YES [ ] NO [X] If yes, provide an explanation of the circumstances and corrective action taken.

c. Is there any administrative charge pending against you?

YES [ ] NO [X] If yes, provide an explanation of the circumstances and corrective action taken.

d. In the past 10 years, have you been convicted, after trial or by plea, of any felony, or of any other crime, an element of which relates to truthfulness or the underlying facts of which related to the conduct of business? Y

YES [ ] NO [X] If yes, provide an explanation of the circumstances and corrective action taken.

e. In the past 5 years, have you been convicted, after trial or by plea, of a misdemeanor?

YES [ ] NO [X] If yes, provide an explanation of the circumstances and corrective action taken.

f. In the past 5 years, have you been found in violation of any administrative or statutory charges?

YES [ ] NO [X] If yes, provide an explanation of the circumstances and corrective action taken.

10. In addition to the information provided in response to the previous questions, in the past 5 years, have you been the subject of a criminal investigation and/or a civil anti-trust investigation by any federal, state or local prosecuting or investigative agency and/or the subject of an investigation where such investigation was related to activities performed at, for, or on behalf of the submitting business entity and/or an affiliated business listed in response to Question 5?

YES [ ] NO [X] If yes, provide an explanation of the circumstances and corrective action taken.

11. In addition to the information provided, in the past 5 years has any business or organization listed in response to Question 5, been the subject of a criminal investigation and/or a civil anti-trust investigation and/or any other type of investigation by any government agency, including but not limited to federal, state, and local regulatory agencies while you were a principal owner or officer?

YES [ ] NO [X] If yes, provide an explanation of the circumstances and corrective action taken.

12. In the past 5 years, have you or this business, or any other affiliated business listed in response to Question 5 had any sanction imposed as a result of judicial or administrative proceedings with respect to any professional license held?

YES [ ] NO [X] If yes, provide an explanation of the circumstances and corrective action taken.

13. For the past 5 tax years, have you failed to file any required tax returns or failed to pay any applicable federal, state or local taxes or other assessed charges, including but not limited to water and sewer charges?

YES [ ] NO [X] If yes, provide an explanation of the circumstances and corrective action taken.

I, John Cardoni , hereby acknowledge that a materially false statement willfully or fraudulently made in connection with this form may result in rendering the submitting business entity and/or any affiliated entities non-responsible, and, in addition, may subject me to criminal charges.

I, John Cardoni , hereby certify that I have read and understand all the items contained in this form; that I supplied full and complete answers to each item therein to the best of my knowledge, information and belief; that I will notify the County in writing of any change in circumstances occurring after the submission of this form; and that all information supplied by me is true to the best of my knowledge, information and belief. I understand that the County will rely on the information supplied in this form as additional inducement to enter into a contract with the submitting business entity.

CERTIFICATION

A MATERIALLY FALSE STATEMENT WILLFULLY OR FRAUDULENTLY MADE IN CONNECTION WITH THIS QUESTIONNAIRE MAY RESULT IN RENDERING THE SUBMITTING BUSINESS ENTITY NOT RESPONSIBLE WITH RESPECT TO THE PRESENT BID OR FUTURE BIDS, AND, IN ADDITION, MAY SUBJECT THE PERSON MAKING THE FALSE STATEMENT TO CRIMINAL CHARGES.

AECOM USA, Inc

Name of submitting business

Electronically signed and certified at the date and time indicated by:
John Cardoni [JOHN.CARDONI@AECOM.COM]

President and COO

Title

09/30/2021 05:50:05 PM

Date

Question5

Redacted

Question 7

Redacted

Question7c

Redacted

PRINCIPAL QUESTIONNAIRE FORM

All questions on these questionnaires must be answered by all officers and any individuals who hold a ten percent (10%) or greater ownership interest in the proposer. Answers typewritten or printed in ink. If you need more space to answer any question, make as many photocopies of the appropriate page(s) as necessary and attach them to the questionnaire.

COMPLETE THIS QUESTIONNAIRE CAREFULLY AND COMPLETELY. FAILURE TO SUBMIT A COMPLETE QUESTIONNAIRE MAY MEAN THAT YOUR BID OR PROPOSAL WILL BE REJECTED AS NON-RESPONSIVE AND IT WILL NOT BE CONSIDERED FOR AWARD

1. Principal Name: Robert Orlin
Date of birth:
Home address:
City: State/Province/Territory: Zip/Postal Code:
Country: US

Business Address: 605 Third Ave
City: New York State/Province/Territory: NY Zip/Postal Code: 10158
Country US
Telephone: (212) 973-3070

Other present address(es):
City: State/Province/Territory: Zip/Postal Code:
Country:
Telephone:

List of other addresses and telephone numbers attached

2. Positions held in submitting business and starting date of each (check all applicable)

President		Treasurer	
Chairman of Board		Shareholder	
Chief Exec. Officer		Secretary	03/01/2011
Chief Financial Officer		Partner	
Vice President	11/01/2006		
(Other)			

3. Do you have an equity interest in the business submitting the questionnaire?
YES [ ] NO [X] If Yes, provide details.

4. Are there any outstanding loans, guarantees or any other form of security or lease or any other type of contribution made in whole or in part between you and the business submitting the questionnaire?
YES [ ] NO [X] If Yes, provide details.

5. Within the past 3 years, have you been a principal owner or officer of any business or notfor-profit organization other than the one submitting the questionnaire?
YES [X] NO [ ] If Yes, provide details.

1 File(s) Uploaded: Nassau Orlin Q5 april 18.pdf

6. Has any governmental entity awarded any contracts to a business or organization listed in Section 5 in the past 3 years while you were a principal owner or officer?

YES [X] NO [ ] If Yes, provide details.

The entities listed in Section 5 are all AECOM owned entities, many of which contract with government clients

NOTE: An affirmative answer is required below whether the sanction arose automatically, by operation of law, or as a result of any action taken by a government agency. Provide a detailed response to all questions checked "YES". If you need more space, photocopy the appropriate page and attach it to the questionnaire.

7. In the past (5) years, have you and/or any affiliated businesses or not-for-profit organizations listed in Section 5 in which you have been a principal owner or officer:

a. Been debarred by any government agency from entering into contracts with that agency?

YES [ ] NO [X] If yes, provide an explanation of the circumstances and corrective action taken.

b. Been declared in default and/or terminated for cause on any contract, and/or had any contracts cancelled for cause?

YES [X] NO [ ] If yes, provide an explanation of the circumstances and corrective action taken.

See Attached.

1 File(s) Uploaded: Nassau PQ Q7b.pdf

c. Been denied the award of a contract and/or the opportunity to bid on a contract, including, but not limited to, failure to meet pre-qualification standards?

YES [X] NO [ ] If yes, provide an explanation of the circumstances and corrective action taken.

See Attached.

1 File(s) Uploaded: Nassau PQ Q7c.pdf

d. Been suspended by any government agency from entering into any contract with it; and/or is any action pending that could formally debar or otherwise affect such business's ability to bid or propose on contract?

YES [ ] NO [X] If yes, provide an explanation of the circumstances and corrective action taken.

8. Have any of the businesses or organizations listed in response to Question 5 filed a bankruptcy petition and/or been the subject of involuntary bankruptcy proceedings during the past 7 years, and/or for any portion of the last 7 year period, been in a state of bankruptcy as a result of bankruptcy proceedings initiated more than 7 years ago and/or is any such business now the subject of any pending bankruptcy proceedings, whenever initiated?

YES [ ] NO [X] If 'Yes', provide details for each such instance. (Provide a detailed response to all questions check "Yes". If you need more space, photocopy the appropriate page and attached it to the questionnaire.)

9.

a. Is there any felony charge pending against you?
YES [ ] NO [X] If yes, provide an explanation of the circumstances and corrective action taken.

b. Is there any misdemeanor charge pending against you?
YES [ ] NO [X] If yes, provide an explanation of the circumstances and corrective action taken.

c. Is there any administrative charge pending against you?
YES [ ] NO [X] If yes, provide an explanation of the circumstances and corrective action taken.

d. In the past 10 years, have you been convicted, after trial or by plea, of any felony, or of any other crime, an element of which relates to truthfulness or the underlying facts of which related to the conduct of business? Y
YES [ ] NO [X] If yes, provide an explanation of the circumstances and corrective action taken.

e. In the past 5 years, have you been convicted, after trial or by plea, of a misdemeanor?
YES [ ] NO [X] If yes, provide an explanation of the circumstances and corrective action taken.

f. In the past 5 years, have you been found in violation of any administrative or statutory charges?
YES [ ] NO [X] If yes, provide an explanation of the circumstances and corrective action taken.

10. In addition to the information provided in response to the previous questions, in the past 5 years, have you been the subject of a criminal investigation and/or a civil anti-trust investigation by any federal, state or local prosecuting or investigative agency and/or the subject of an investigation where such investigation was related to activities performed at, for, or on behalf of the submitting business entity and/or an affiliated business listed in response to Question 5?

YES		NO	X	If yes, provide an explanation of the circumstances and corrective action taken.

11. In addition to the information provided, in the past 5 years has any business or organization listed in response to Question 5, been the subject of a criminal investigation and/or a civil anti-trust investigation and/or any other type of investigation by any government agency, including but not limited to federal, state, and local regulatory agencies while you were a principal owner or officer?

YES		NO	X	If yes, provide an explanation of the circumstances and corrective action taken.

12. In the past 5 years, have you or this business, or any other affiliated business listed in response to Question 5 had any sanction imposed as a result of judicial or administrative proceedings with respect to any professional license held?

YES		NO	X	If yes, provide an explanation of the circumstances and corrective action taken.

13. For the past 5 tax years, have you failed to file any required tax returns or failed to pay any applicable federal, state or local taxes or other assessed charges, including but not limited to water and sewer charges?

YES		NO	X	If yes, provide an explanation of the circumstances and corrective action taken.

I, Robert Orlin , hereby acknowledge that a materially false statement willfully or fraudulently made in connection with this form may result in rendering the submitting business entity and/or any affiliated entities non-responsible, and, in addition, may subject me to criminal charges.

I, Robert Orlin , hereby certify that I have read and understand all the items contained in this form; that I supplied full and complete answers to each item therein to the best of my knowledge, information and belief; that I will notify the County in writing of any change in circumstances occurring after the submission of this form; and that all information supplied by me is true to the best of my knowledge, information and belief. I understand that the County will rely on the information supplied in this form as additional inducement to enter into a contract with the submitting business entity.

CERTIFICATION

A MATERIALLY FALSE STATEMENT WILLFULLY OR FRAUDULENTLY MADE IN CONNECTION WITH THIS QUESTIONNAIRE MAY RESULT IN RENDERING THE SUBMITTING BUSINESS ENTITY NOT RESPONSIBLE WITH RESPECT TO THE PRESENT BID OR FUTURE BIDS, AND, IN ADDITION, MAY SUBJECT THE PERSON MAKING THE FALSE STATEMENT TO CRIMINAL CHARGES.

AECOM USA, Inc.

Name of submitting business

Electronically signed and certified at the date and time indicated by:
Robert Orlin [ROBERT.ORLIN@AECOM.COM]

VP & Secretary

Title

09/30/2021 03:48:46 PM

Date

Question5

Redacted

Question 7

Redacted

Question7c

Redacted

PRINCIPAL QUESTIONNAIRE FORM

All questions on these questionnaires must be answered by all officers and any individuals who hold a ten percent (10%) or greater ownership interest in the proposer. Answers typewritten or printed in ink. If you need more space to answer any question, make as many photocopies of the appropriate page(s) as necessary and attach them to the questionnaire.

COMPLETE THIS QUESTIONNAIRE CAREFULLY AND COMPLETELY. FAILURE TO SUBMIT A COMPLETE QUESTIONNAIRE MAY MEAN THAT YOUR BID OR PROPOSAL WILL BE REJECTED AS NON-RESPONSIVE AND IT WILL NOT BE CONSIDERED FOR AWARD

1. Principal Name: Vishnu Ramlagan
   Date of birth:
   Home address:
   City: State/Province/Territory: Zip/Postal Code:
   Country: US

   Business Address: 605 3rd Ave
   City: New York State/Province/Territory: NY Zip/Postal Code: 10010
   Country US
   Telephone: 3478358642

   Other present address(es):
   City: State/Province/Territory: Zip/Postal Code:
   Country:
   Telephone:

   List of other addresses and telephone numbers attached

2. Positions held in submitting business and starting date of each (check all applicable)

President		Treasurer	09/25/2020
Chairman of Board		Shareholder	
Chief Exec. Officer		Secretary	
Chief Financial Officer	09/25/2020	Partner	
Vice President			
(Other)			

3. Do you have an equity interest in the business submitting the questionnaire?
   YES [ ] NO [X] If Yes, provide details.

4. Are there any outstanding loans, guarantees or any other form of security or lease or any other type of contribution made in whole or in part between you and the business submitting the questionnaire?
   YES [ ] NO [X] If Yes, provide details.

5. Within the past 3 years, have you been a principal owner or officer of any business or notfor-profit organization other than the one submitting the questionnaire?
   YES [X] NO [ ] If Yes, provide details.

1 File(s) Uploaded: Vishnu R Nassau Q5 AECOM USA (003).pdf

6. Has any governmental entity awarded any contracts to a business or organization listed in Section 5 in the past 3 years while you were a principal owner or officer?

YES [X] NO [ ] If Yes, provide details.

The entities listed from Question 5 (attached) are all AECOM owned entities, many of which contract with government entities.

NOTE: An affirmative answer is required below whether the sanction arose automatically, by operation of law, or as a result of any action taken by a government agency. Provide a detailed response to all questions checked "YES". If you need more space, photocopy the appropriate page and attach it to the questionnaire.

7. In the past (5) years, have you and/or any affiliated businesses or not-for-profit organizations listed in Section 5 in which you have been a principal owner or officer:

a. Been debarred by any government agency from entering into contracts with that agency?

YES [ ] NO [X] If yes, provide an explanation of the circumstances and corrective action taken.

b. Been declared in default and/or terminated for cause on any contract, and/or had any contracts cancelled for cause?

YES [ ] NO [X] If yes, provide an explanation of the circumstances and corrective action taken.

c. Been denied the award of a contract and/or the opportunity to bid on a contract, including, but not limited to, failure to meet pre-qualification standards?

YES [ ] NO [X] If yes, provide an explanation of the circumstances and corrective action taken.

d. Been suspended by any government agency from entering into any contract with it; and/or is any action pending that could formally debar or otherwise affect such business's ability to bid or propose on contract?

YES [ ] NO [X] If yes, provide an explanation of the circumstances and corrective action taken.

8. Have any of the businesses or organizations listed in response to Question 5 filed a bankruptcy petition and/or been the subject of involuntary bankruptcy proceedings during the past 7 years, and/or for any portion of the last 7 year period, been in a state of bankruptcy as a result of bankruptcy proceedings initiated more than 7 years ago and/or is any such business now the subject of any pending bankruptcy proceedings, whenever

initiated?

YES [ ] NO [X] If 'Yes', provide details for each such instance. (Provide a detailed response to all questions check "Yes". If you need more space, photocopy the appropriate page and attached it to the questionnaire.)

9.

a. Is there any felony charge pending against you?
YES [ ] NO [X] If yes, provide an explanation of the circumstances and corrective action taken.

b. Is there any misdemeanor charge pending against you?
YES [ ] NO [X] If yes, provide an explanation of the circumstances and corrective action taken.

c. Is there any administrative charge pending against you?
YES [ ] NO [X] If yes, provide an explanation of the circumstances and corrective action taken.

d. In the past 10 years, have you been convicted, after trial or by plea, of any felony, or of any other crime, an element of which relates to truthfulness or the underlying facts of which related to the conduct of business? Y
YES [ ] NO [X] If yes, provide an explanation of the circumstances and corrective action taken.

e. In the past 5 years, have you been convicted, after trial or by plea, of a misdemeanor?
YES [ ] NO [X] If yes, provide an explanation of the circumstances and corrective action taken.

f. In the past 5 years, have you been found in violation of any administrative or statutory charges?
YES [ ] NO [X] If yes, provide an explanation of the circumstances and corrective action taken.

10. In addition to the information provided in response to the previous questions, in the past 5 years, have you

been the subject of a criminal investigation and/or a civil anti-trust investigation by any federal, state or local prosecuting or investigative agency and/or the subject of an investigation where such investigation was related to activities performed at, for, or on behalf of the submitting business entity and/or an affiliated business listed in response to Question 5?

YES [ ] NO [X] If yes, provide an explanation of the circumstances and corrective action taken.

11. In addition to the information provided, in the past 5 years has any business or organization listed in response to Question 5, been the subject of a criminal investigation and/or a civil anti-trust investigation and/or any other type of investigation by any government agency, including but not limited to federal, state, and local regulatory agencies while you were a principal owner or officer?

YES [ ] NO [X] If yes, provide an explanation of the circumstances and corrective action taken.

12. In the past 5 years, have you or this business, or any other affiliated business listed in response to Question 5 had any sanction imposed as a result of judicial or administrative proceedings with respect to any professional license held?

YES [ ] NO [X] If yes, provide an explanation of the circumstances and corrective action taken.

13. For the past 5 tax years, have you failed to file any required tax returns or failed to pay any applicable federal, state or local taxes or other assessed charges, including but not limited to water and sewer charges?

YES [ ] NO [X] If yes, provide an explanation of the circumstances and corrective action taken.

I, VISHNU RAMLAGAN , hereby acknowledge that a materially false statement willfully or fraudulently made in connection with this form may result in rendering the submitting business entity and/or any affiliated entities non-responsible, and, in addition, may subject me to criminal charges.

I, VISHNU RAMLAGAN , hereby certify that I have read and understand all the items contained in this form; that I supplied full and complete answers to each item therein to the best of my knowledge, information and belief; that I will notify the County in writing of any change in circumstances occurring after the submission of this form; and that all information supplied by me is true to the best of my knowledge, information and belief. I understand that the County will rely on the information supplied in this form as additional inducement to enter into a contract with the submitting business entity.

CERTIFICATION

A MATERIALLY FALSE STATEMENT WILLFULLY OR FRAUDULENTLY MADE IN CONNECTION WITH THIS QUESTIONNAIRE MAY RESULT IN RENDERING THE SUBMITTING BUSINESS ENTITY NOT RESPONSIBLE WITH RESPECT TO THE PRESENT BID OR FUTURE BIDS, AND, IN ADDITION, MAY SUBJECT THE PERSON MAKING THE FALSE STATEMENT TO CRIMINAL CHARGES.

AECOM USA INC

Name of submitting business

Electronically signed and certified at the date and time indicated by:
VISHNU RAMLAGAN [VISHNU.RAMLAGAN@AECOM.COM]

CFO

Title

10/04/2021 10:19:20 AM

Date

Question5

Redacted

Business History Form

The contract shall be awarded to the responsible proposer who, at the discretion of the County, taking into consideration the reliability of the proposer and the capacity of the proposer to perform the services required by the County, offers the best value to the County and who will best promote the public interest.

In addition to the submission of proposals, each proposer shall complete and submit this questionnaire. The questionnaire shall be filled out by the owner of a sole proprietorship or by an authorized representative of the firm, corporation or partnership submitting the Proposal.

NOTE: All questions require a response, even if response is "none" or "not-applicable." No blanks.

(USE ADDITIONAL SHEETS IF NECESSARY TO FULLY ANSWER THE FOLLOWING QUESTIONS).

Date: 09/20/2021

1) Proposer's Legal Name: AECOM USA, Inc.

2) Address of Place of Business: 200 Broadhollow Road, Suite 207

City: Melville State/Province/Territory: NY Zip/Postal Code: 11747

Country: US

Address: 605 Third Ave
City: New York State/Province/Territory: NY Zip/Postal Code: 10158
Country: US
Start Date: End Date:

3) Mailing Address (if different): 605 Third Avenue

City: New York State/Province/Territory: Zip/Postal Code:

Country:

Phone: (212) 973-2900

Does the business own or rent its facilities? Rent If other, please provide details:

4) Dun and Bradstreet number: 173-747-726

5) Federal I.D. Number: 13-5511947

6) The proposer is a: Corporation (Describe)

7) Does this business share office space, staff, or equipment expenses with any other business?

YES [X] NO [ ] If yes, please provide details:

AECOM USA, Inc. shares space & equipment with other affiliated entities under AECOM ownership

8) Does this business control one or more other businesses?

YES [X] NO [ ] If yes, please provide details:

See attached list of subsidiary entities

1 File(s) Uploaded: AECOM USA Subsidiaries List March 21.pdf

9) Does this business have one or more affiliates, and/or is it a subsidiary of, or controlled by, any other business?
YES [X] NO [ ] If yes, please provide details:

AECOM USA, Inc. is a subsidiary of AECOM Technical Services, Inc. See attached list of affiliates.

1 File(s) Uploaded: AECOM USA Affiliates.pdf

10) Has the proposer ever had a bond or surety cancelled or forfeited, or a contract with Nassau County or any other government entity terminated?
YES [X] NO [ ] If yes, state the name of bonding agency, (if a bond), date, amount of bond and reason for such cancellation or forfeiture: or details regarding the termination (if a contract).

See Attached.

1 File(s) Uploaded: AECOM USA Q10 Nassau.pdf

11) Has the proposer, during the past seven years, been declared bankrupt?
YES [ ] NO [X] If yes, state date, court jurisdiction, amount of liabilities and amount of assets

12) In the past five years, has this business and/or any of its owners and/or officers and/or any affiliated business, been the subject of a criminal investigation and/or a civil anti-trust investigation by any federal, state or local prosecuting or investigative agency? And/or, in the past 5 years, have any owner and/or officer of any affiliated business been the subject of a criminal investigation and/or a civil anti-trust investigation by any federal, state or local prosecuting or investigative agency, where such investigation was related to activities performed at, for, or on behalf of an affiliated business.
YES [X] NO [ ] If yes, provide details for each such investigation, an explanation of the circumstances and corrective action taken.

See Attachment

1 File(s) Uploaded: AECOM USA Q12 Nassau BH.pdf

13) In the past 5 years, has this business and/or any of its owners and/or officers and/or any affiliated business been the subject of an investigation by any government agency, including but not limited to federal, state and local regulatory agencies? And/or, in the past 5 years, has any owner and/or officer of an affiliated business been the subject of an investigation by any government agency, including but not limited to federal, state and local regulatory agencies, for matters pertaining to that individual's position at or relationship to an affiliated business.
YES [X] NO [ ] If yes, provide details for each such investigation, an explanation of the circumstances and corrective action taken.

See Attachment

1 File(s) Uploaded: AECOM USA Nassau BH Q13 March 2021.pdf

14) Has any current or former director, owner or officer or managerial employee of this business had, either before or during such person's employment, or since such employment if the charges pertained to events that allegedly occurred during the time of employment by the submitting business, and allegedly related to the conduct of that business:
a) Any felony charge pending?
YES [ ] NO [X] If yes, provide details for each such investigation, an explanation of the circumstances and corrective action taken.

b) Any misdemeanor charge pending?
YES [ ] NO [X] If yes, provide details for each such investigation, an explanation of the circumstances and corrective action taken.

c) In the past 10 years, you been convicted, after trial or by plea, of any felony and/or any other crime, an element of which relates to truthfulness or the underlying facts of which related to the conduct of business?
YES [ ] NO [X] If yes, provide details for each such investigation, an explanation of the circumstances and corrective action taken.

d) In the past 5 years, been convicted, after trial or by plea, of a misdemeanor?
YES [ ] NO [X] If yes, provide details for each such investigation, an explanation of the circumstances and corrective action taken.

e) In the past 5 years, been found in violation of any administrative, statutory, or regulatory provisions?
YES [ ] NO [X] If yes, provide details for each such investigation, an explanation of the circumstances and corrective action taken.

15) In the past (5) years, has this business or any of its owners or officers, or any other affiliated business had any sanction imposed as a result of judicial or administrative proceedings with respect to any professional license held?
YES [ ] NO [X] If yes, provide details for each such investigation, an explanation of the circumstances and corrective action taken.

16) For the past (5) tax years, has this business failed to file any required tax returns or failed to pay any applicable federal, state or local taxes or other assessed charges, including but not limited to water and sewer charges?
YES [ ] NO [X] If yes, provide details for each such year. Provide a detailed response to all questions checked 'YES'. If you need more space, photocopy the appropriate page and attach it to the questionnaire.

17 Conflict of Interest:

a) Please disclose any conflicts of interest as outlined below. NOTE: If no conflicts exist, please expressly state "No conflict exists."

(i) Any material financial relationships that your firm or any firm employee has that may create a conflict of interest or the appearance of a conflict of interest in acting on behalf of Nassau County.

No conflicts exist

(ii) Any family relationship that any employee of your firm has with any County public servant that may

create a conflict of interest or the appearance of a conflict of interest in acting on behalf of Nassau County.

No conflicts exist

(iii) Any other matter that your firm believes may create a conflict of interest or the appearance of a conflict of interest in acting on behalf of Nassau County.

No conflicts exist

b) Please describe any procedures your firm has, or would adopt, to assure the County that a conflict of interest would not exist for your firm in the future.

As part of its operations, AECOM evaluates potential conflicts prior to pursuing opportunities with new and existing clients. The evaluation is part of AECOM's "go/no go" decision process and includes input from Operations, Legal and Client Account Managers.

A. Include a resume or detailed description of the Proposer's professional qualifications, demonstrating extensive experience in your profession. Any prior similar experiences, and the results of these experiences, must be identified.

Have you previously uploaded the below information under in the Document Vault?
YES [ ] NO [X]

Is the proposer an individual?
YES [ ] NO [X] Should the proposer be other than an individual, the Proposal MUST include:

i) Date of formation;

05/03/1930

ii) Name, addresses, and position of all persons having a financial interest in the company, including shareholders, members, general or limited partner. If none, explain.

AECOM USA, Inc. is wholly owned by AECOM Technical Services, Inc., and is ultimately owned by AECOM, a Delaware Corporation that is publicly traded company on the NYSE (symbol ACM).

No individuals with a financial interest in the company have been attached..

iii) Name, address and position of all officers and directors of the company. If none, explain.

See Attachment

No officers and directors from this company have been attached.

1 File(s) Uploaded: AECOM USA Directors+Officers Sept 2021.doc

iv) State of incorporation (if applicable);

NY

v) The number of employees in the firm;

78000

vi) Annual revenue of firm;

4209365

vii) Summary of relevant accomplishments

see technical proposal

viii) Copies of all state and local licenses and permits.

1 File(s) Uploaded: AECOM USA Inc. New York Engineering COA #0018196 Exp. 12-31-2023.pdf

B. Indicate number of years in business.

89

C. Provide any other information which would be appropriate and helpful in determining the Proposer's capacity and reliability to perform these services.

see technical proposal

D. Provide names and addresses for no fewer than three references for whom the Proposer has provided similar services or who are qualified to evaluate the Proposer's capability to perform this work.

Company	SUNY/Fashion Institute of Technology (FIT)		
Contact Person	George Jefremow		
Address	227 West 27th Street		
City	New York	State/Province/Territory	NY
Country	US		
Telephone	(212) 217-7999		
Fax #			
E-Mail Address	george_jefremow@fitnyc.edu		

Company	Dormitory Authority of the State of New York		
Contact Person	Paul J. Goncalves		
Address	723 Anderson Hill Road		
City	Purchase	State/Province/Territory	NY
Country	US		
Telephone	(914) 251-4434		
Fax #			
E-Mail Address	pgonclav@dasny.org		

Company	NYC Department of Design and Construction		
Contact Person	Eric Macfarlane, PE		
Address	30-30 Thompson Avenue		
City	Long Island City	State/Province/Territory	NY
Country	US		
Telephone	(718) 391-3142		
Fax #			
E-Mail Address	macfarla@ddc.nyc.gov		

I, Robert Orlin , hereby acknowledge that a materially false statement willfully or fraudulently made in connection with this form may result in rendering the submitting business entity and/or any affiliated entities non-responsible, and, in addition, may subject me to criminal charges.

I, Robert Orlin , hereby certify that I have read and understand all the items contained in this form; that I supplied full and complete answers to each item therein to the best of my knowledge, information and belief; that I will notify the County in writing of any change in circumstances occurring after the submission of this form; and that all information supplied by me is true to the best of my knowledge, information and belief. I understand that the County will rely on the information supplied in this form as additional inducement to enter into a contract with the submitting business entity.

CERTIFICATION

A MATERIALLY FALSE STATEMENT WILLFULLY OR FRAUDULENTLY MADE IN CONNECTION WITH THIS QUESTIONNAIRE MAY RESULT IN RENDERING THE SUBMITTING BUSINESS ENTITY NOT RESPONSIBLE WITH RESPECT TO THE PRESENT BID OR FUTURE BIDS, AND, IN ADDITION, MAY SUBJECT THE PERSON MAKING THE FALSE STATEMENT TO CRIMINAL CHARGES.

Name of submitting business: AECOM USA, Inc.

Electronically signed and certified at the date and time indicated by:
Robert Orlin [ROBERT.ORLIN@AECOM.COM]

VP & Secretary
Title

09/20/2021 09:53:18 AM
Date

List of AECOM USA, Inc. Affiliates

AECOM USA, Inc. (AUSA) is a direct, wholly owned subsidiary of AECOM Technical Services, Inc. and an indirect, wholly owned subsidiary of AECOM, a Delaware corporation whose stock is publicly traded on the New York Stock Exchange (ACM/NYSE). The following is a list, compiled after reasonable research and inquiry, of AUSA's domestic and foreign affiliates. The principal address for AUSA is 605 Third Avenue, New York, NY 10158. All other companies can receive mail there as well.

Domestic

AECOM C&E, Inc. (Delaware)
AECOM Infrastructure, Inc. (New York)
AECOM Services, Inc. (California)
CASS Water Engineering, Inc. (Delaware)
Davis Langdon, Inc. (California)
Economics Research Associates (California)
EDAW, Inc. (Delaware)
Earth Tech Environment & Infrastructure, Inc. (Wisconsin)
Earth Tech WE Holding, Inc. (Delaware)
The Hunt Corporation (Indiana)
Tishman Construction Corporation (Delaware)
URS Corporation (Nevada)

Foreign

Grupo Rust International di Venezuela C.A. (Venezuela)
AECOM INGENIERIA S.A. de C. V. (Mexico) (99% owned)
Shanghai Earth Tech Eng. Cons. Co Lid. (China) (48% owned)

AECOM USA, INC.
DIRECTORS AND OFFICERS

Directors

Robert K. Orlin
Paul Storella
John Cardoni

Chief Executive Officer: Frederick W. Werner

President & Chief Operating Officer: John Cardoni

Senior Vice Presidents

Albert J. Bast, III
Kevin Cornish
Daniel G. Faust
Majid Hedayati
Glen T. Kartalis
Abbas Sarmad
Paul Storella
Louis A. Tucciarone
Rick Brannon

Vice Presidents

John R. Azzaro
David Beckett
Christopher K. Bennett
Octavian Cana
Thomas Cascino
John Deerkoski
Donald Hromada
John S. Hagedorn
Frank J. LaPlaca
George A. Leahy
Robert Lowe
Thomas C. MacAllen
Christopher McDermott
Aly M. Mohammed
Robert E. Murphy
Archille A. Niro
Robert K. Orlin
Richard Paupst
Anil Parikh
Thomas P. Quaranta
Ira C. Quiat
Tom Scerbo
Touraj H. Tehrani
Christine Tiernan-Varricchio
Robert M. Totillo
Dipal Vimawala
Robert E. Wright
Joseph F. Zafonte

Other Officers

Vishnu Ramlagan, Chief Financial Officer
Robert K. Orlin, Secretary
Jeff Rosenstein, Assistant Secretary
Michael Klerer, Assistant Secretary
Matthew Riley, Assistant Secretary
Lusanna Ro, Assistant Secretary
Armond Tatevossian, Assistant Secretary

THE UNIVERSITY OF THE STATE OF NEW YORK
EDUCATION DEPARTMENT

THIS IS TO CERTIFY THAT HAVING MET THE REQUIREMENTS OF SECTION 7210 OF THE EDUCATION LAW AND IN ACCORDANCE THEREWITH THIS CERTIFICATE OF AUTHORIZATION IS GRANTED WHICH ENTITLES

AECOM USA INC
CT-BLMS
120 S CENTRAL AVENUE
SUITE 400
CLAYTON, MO 63105-0000

TO PROVIDE PROFESSIONAL ENGINEERING SERVICES IN THE STATE OF NEW YORK FOR THE PERIOD 01/01/2021 TO 12/31/2023.

CERTIFICATE NUMBER
0018196

BETTY ROSA
INTERIM COMMISSIONER OF EDUCATION

Question 10

Redacted

Questions 12

Redacted

Questions 13

a. Redacted

List of AECOM USA, Inc. Subsidiaries

AECOM USA, Inc. (AUSA) is a direct, wholly owned subsidiary of AECOM Technical Services, Inc. and an indirect, wholly owned subsidiary of AECOM, a Delaware corporation whose stock is publicly traded on the New York Stock Exchange (ACM/NYSE). The following is a list, compiled after reasonable research and inquiry, of AUSA's domestic and foreign subsidiaries. The principal address for AUSA is 605 Third Avenue, New York, NY 10158. All other companies can receive mail there as well.

Domestic

AECOM Architects & Engineers (NJ), Inc. (New Jersey)
AECOM Libya Housing and Infrastructure, Inc. (Delaware)
AECOM Pacific, Inc. (Delaware)
AECOM USA of Massachusetts, Inc. (Massachusetts)
AECOM USA of Michigan, Inc. (Delaware)
Boyle Holding Corporation (California)
Consoer, Townsend & Associates, Inc. (Delaware)
Consoer Townsend Envirodyne Engineers of Indiana, Inc. (Delaware)
Consoer Townsend Envirodyne Engineers of Ohio, Inc. (Delaware)
DMJM Aviation, Inc. (Delaware)
DMJM, Inc. (Delaware)
Egis-Semaly, Inc. (New York)
Envirodyne Engineers, Inc. (Delaware)
Frederic R. Harris, Inc. (Delaware)
AECOM-Hill JV (50%)
Lim & Nascimento Engineering Corporation (California)
Material Testing Services, Inc. (Illinois)
Metcalf & Eddy of New York, Inc. (New York)
Metcalf & Eddy of Ohio, Inc. (Ohio)
P&D Consultants, Inc. (Delaware)
Subsurface Exploration, Inc. (Illinois)
Subsurface Testing Services, Ltd. (Illinois)
Ellerbe Becket Company, LLC (Delaware)
Urbitran Architectural/Engineering Group, Inc. (Connecticut) (66. 7% owned)
Urbitran Architectural/Engineering Group, PLLC (New York) (70% owned)

COUNTY OF NASSAU

CONSULTANT'S, CONTRACTOR'S AND VENDOR'S DISCLOSURE FORM

1. Name of the Entity: AECOM USA, Inc.

Address: 200 Broadhollow Road, Suite 207

City: Melville State/Province/Territory: NY Zip/Postal Code: 11747

Country: US

2. Entity's Vendor Identification Number: 13-5511947

3. Type of Business: Closely Held Corp (specify)

4. List names and addresses of all principals; that is, all individuals serving on the Board of Directors or comparable body, all partners and limited partners, all corporate officers, all parties of Joint Ventures, and all members and officers of limited liability companies (attach additional sheets if necessary):

First Name John
Last Name Cardoni
MI Suffix
Address 250 Apollo Drive
City Chelmsford State/Province/Territory: MA Zip/Postal Code: 01824
Country US
Position President

First Name Robert
Last Name Orlin
MI Suffix
Address 605 Third Ave
City New York State/Province/Territory: NY Zip/Postal Code: 10158
Country US
Position Secretary

First Name Vishnu
Last Name Ramlagan
MI Suffix
Address 605 Third Ave
City New York State/Province/Territory: NY Zip/Postal Code: 10158
Country US
Position Chief Financial Officer

5. List names and addresses of all shareholders, members, or partners of the firm. If the shareholder is not an individual, list the individual shareholders/partners/members. If a Publicly held Corporation, include a copy of the 10K in lieu of completing this section.
If none, explain.

AECOM USA, Inc. is owned by AECOM Technical Services Inc., and is ultimately owned by AECOM, a Delaware Corporation that is publicly traded on the New York Stock Exchange and under the symbol ACM.

1 File(s) uploaded AECOM 10K Nov 2020.pdf

No shareholders, members, or partners have been attached to this form.

6. List all affiliated and related companies and their relationship to the firm entered on line 1. above (if none, enter "None"). Attach a separate disclosure form for each affiliated or subsidiary company that may take part in the performance of this contract. Such disclosure shall be updated to include affiliated or subsidiary companies not previously disclosed that participate in the performance of the contract.

See attached list of affiliates (other entities owned by AECOM Technical Services, Inc. and Subsidiary entities owned by AECOM USA, Inc.)

1 File(s) uploaded Nassau CCV Q6.pdf

7. List all lobbyists whose services were utilized at any stage in this matter (i.e., pre-bid, bid, post-bid, etc.). If none, enter "None." The term "lobbyist" means any and every person or organization retained, employed or designated by any client to influence - or promote a matter before - Nassau County, its agencies, boards, commissions, department heads, legislators or committees, including but not limited to the Open Space and Parks Advisory Committee and Planning Commission. Such matters include, but are not limited to, requests for proposals, development or improvement of real property subject to County regulation, procurements. The term "lobbyist" does not include any officer, director, trustee, employee, counsel or agent of the County of Nassau, or State of New York, when discharging his or her official duties.

Are there lobbyists involved in this matter?
YES [ ] NO [X]

(a) Name, title, business address and telephone number of lobbyist(s):

None

(b) Describe lobbying activity of each lobbyist. See below for a complete description of lobbying activities.

None

(c) List whether and where the person/organization is registered as a lobbyist (e.g., Nassau County, New York State):

None

8. VERIFICATION: This section must be signed by a principal of the consultant, contractor or Vendor authorized as a signatory of the firm for the purpose of executing Contracts.

The undersigned affirms and so swears that he/she has read and understood the foregoing statements and they are, to his/her knowledge, true and accurate.

Electronically signed and certified at the date and time indicated by:
Robert Orlin [ROBERT.ORLIN@AECOM.COM]

Dated: 09/30/2021 03:50:38 PM

Title: VP & Secretary

The term lobbying shall mean any attempt to influence: any determination made by the Nassau County Legislature, or any member thereof, with respect to the introduction, passage, defeat, or substance of any local legislation or resolution; any determination by the County Executive to support, oppose, approve or disapprove any local legislation or resolution, whether or not such legislation has been introduced in the County Legislature; any determination by an elected County official or an officer or employee of the County with respect to the procurement of goods, services or construction, including the preparation of contract specifications, including by not limited to the preparation of requests for proposals, or solicitation, award or administration of a contract or with respect to the solicitation, award or administration of a grant, loan, or agreement involving the disbursement of public monies; any determination made by the County Executive, County Legislature, or by the County of Nassau, its agencies, boards, commissions, department heads or committees, including but not limited to the Open Space and Parks Advisory Committee, the Planning Commission, with respect to the zoning, use, development or improvement of real property subject to County regulation, or any agencies, boards, commissions, department heads or committees with respect to requests for proposals, bidding, procurement or contracting for services for the County; any determination made by an elected county official or an officer or employee of the county with respect to the terms of the acquisition or disposition by the county of any interest in real property, with respect to a license or permit for the use of real property of or by the county, or with respect to a franchise, concession or revocable consent; the proposal, adoption, amendment or rejection by an agency of any rule having the force and effect of law; the decision to hold, timing or outcome of any rate making proceeding before an agency; the agenda or any determination of a board or commission; any determination regarding the calendaring or scope of any legislature oversight hearing; the issuance, repeal, modification or substance of a County Executive Order; or any determination made by an elected county official or an officer or employee of the county to support or oppose any state or federal legislation, rule or regulation, including any determination made to support or oppose that is contingent on any amendment of such legislation, rule or regulation, whether or not such legislation has been formally introduced and whether or not such rule or regulation has been formally proposed.

Table of Contents

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION

WASHINGTON, D.C. 20549

FORM 10-K

(Mark one)

☒ **ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**
FOR THE FISCAL YEAR ENDED SEPTEMBER 30, 2019

OR

☐ **TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**
For the transition period from to

Commission file number 0-52423

AECOM

(Exact name of Registrant as specified in its charter)

Delaware	**61-1088522**
State or Other Jurisdiction Of Incorporation or Organization	I.R.S. Employer Identification Number

1999 Avenue of the Stars, Suite 2600	
Los Angeles, California	**90067**
Address of Principal Executive Offices	Zip Code

(213) 593-8000
Registrant's Telephone Number, Including Area Code

Former Name, Former Address and Former Fiscal Year, if Changed Since Last Report

Securities registered pursuant to Section 12(b) of the Act:

Title of each class	Trading Symbol(s)	Name of each exchange on which registered
Common Stock, $0.01 par value	ACM	New York Stock Exchange

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. ☒ Yes ☐ No

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act. ☐ Yes ☒ No

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. ☒ Yes ☐ No

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (§ 232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit such files). ☒ Yes ☐ No

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company, or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company," and "emerging growth company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer	☒	Accelerated filer	☐
Non-accelerated filer	☐	Smaller reporting company	☐
		Emerging growth company	☐

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act. ☐

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Act). Yes ☐ No ☒

The aggregate market value of registrant's common stock held by non-affiliates on March 29, 2019 (the last business day of the registrant's most recently completed second fiscal quarter), based upon the closing price of a share of the registrant's common stock on such date as reported on the New York Stock Exchange was approximately $4.4 billion.

Number of shares of the registrant's common stock outstanding as of November 4, 2019: 157,086,194

DOCUMENTS INCORPORATED BY REFERENCE

Part III incorporates information by reference from the registrant's definitive proxy statement for the 2020 Annual Meeting of Stockholders, to be filed within 120 days of the registrant's fiscal 2019 year end.

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PART I

ITEM 1. BUSINESS

In this report, we use the terms "the Company," "we," "us" and "our" to refer to AECOM and its consolidated subsidiaries. Unless otherwise noted, references to years are for fiscal years. Our fiscal year consists of 52 or 53 weeks, ending on the Friday closest to September 30. For clarity of presentation, we present all periods as if the year ended on September 30. We refer to the fiscal year ended September 30, 2018 as "fiscal 2018" and the fiscal year ended September 30, 2019 as "fiscal 2019."

Overview

We are a leading fully integrated firm positioned to design, build, finance and operate infrastructure assets for governments, businesses and organizations throughout the world. We provide planning, consulting, architectural and engineering design services to commercial and government clients worldwide in major end markets such as transportation, facilities, environmental, energy, water and government markets. We also provide construction services, including building construction and energy, infrastructure and industrial construction, primarily in the Americas. In addition, we provide program and facilities management and maintenance, training, logistics, consulting, technical assistance, and systems integration and information technology services, primarily for agencies of the U.S. government and also for national governments around the world. According to *Engineering News-Record*'s (ENR's) 2019 Design Survey, we are the second largest general architectural and engineering design firm in the world, ranked by 2018 design revenue. In addition, we are ranked by ENR as the leading firm in a number of design end markets, including transportation and general building.

We were formed in 1980 as Ashland Technology Company, a Delaware corporation and a wholly-owned subsidiary of Ashland, Inc., an oil and gas refining and distribution company. Since becoming independent of Ashland Inc., we have grown by a combination of organic growth and strategic mergers and acquisitions from approximately 3,300 employees and $387 million in revenue in fiscal 1991, the first full fiscal year of independent operations, to approximately 86,000 employees at September 30, 2019 and $20.2 billion in revenue for fiscal 2019. We completed the initial public offering of our common stock in May 2007 and these shares are traded on the New York Stock Exchange.

We report our business through four segments, each of which is described in further detail below: Design and Consulting Services (DCS), Construction Services (CS), Management Services (MS), and AECOM Capital (ACAP). Such segments are organized by the types of services provided, the differing specialized needs of the respective clients, and how we manage the business. We have aggregated various operating segments into our reportable segments based on their similar characteristics, including similar long term financial performance, the nature of services provided, internal processes for delivering those services, and types of customers.

- *Design and Consulting Services (DCS):* Planning, consulting, architectural and engineering design services to commercial and government clients worldwide in major end markets such as transportation, facilities, environmental, energy, water and government.

- *Construction Services (CS):* Construction services, including building construction and energy, infrastructure and industrial construction, primarily in the Americas.

- *Management Services (MS):* Program and facilities management and maintenance, training, logistics, consulting, technical assistance, and systems integration and information technology services, primarily for agencies of the U.S. government and other national governments around the world.

- *AECOM Capital (ACAP):* Investments primarily in real estate projects.

Our Design and Consulting Services Segment

Our DCS segment comprises a broad array of services, generally provided on a fee-for-service basis. These services include planning, consulting, architectural and engineering design, program management and construction management for industrial, commercial, institutional and government clients worldwide. For each of these services, our technical expertise includes civil, structural, process, mechanical, geotechnical systems and electrical engineering, architectural, landscape and interior design, urban and regional planning, project economics, cost consulting and environmental, health and safety work.

With our technical and management expertise, we are able to provide our clients a broad spectrum of services. For example, within our environmental management service offerings, we provide remediation, regulatory compliance planning and management, environmental modeling, environmental impact assessment and environmental permitting for major capital/infrastructure projects.

Our services may be sequenced over multiple phases. For example, in the area of program management and construction management services, our work for a client may begin with a small consulting or planning contract, and may later develop into an overall management role for the project or a series of projects, which we refer to as a program. Program and construction management contracts may employ small or large project teams and, in many cases, operate as an outsourcing arrangement with our staff located at the project site.

We provide the services in our DCS segment both directly and through joint ventures or similar partner arrangements to the following end markets or business sectors:

Transportation.

- *Transit and Rail.* Light rail, heavy rail (including high-speed, commuter and freight) and multimodal transit projects.
- *Marine, Ports and Harbors.* Wharf facilities and container port facilities for private and public port operators.
- *Highways, Bridges and Tunnels.* Interstate, primary and secondary urban and rural highway systems and bridge projects.
- *Aviation.* Landside terminal and airside facilities, runways and taxiways.

Facilities.

- *Government.* Emergency response services for the U.S. Department of Homeland Security, including the Federal Emergency Management Agency and engineering and program management services for agencies of the Department of Defense and Department of Energy.
- *Industrial.* Industrial facilities for a variety of niche end markets such as manufacturing, distribution, aviation, aerospace, communications, media, pharmaceuticals, renewable energy, chemical, and food and beverage facilities.
- *Urban Master Planning/Design.* Strategic planning and master planning services for new cities and major mixed use developments in India, China, Southeast Asia, the Middle East, North Africa, the United Kingdom and the United States.
- *Commercial and Leisure Facilities.* Corporate headquarters, high-rise office towers, historic buildings, hotels, leisure, sports and entertainment facilities and corporate campuses.

- *Educational.* College and university campuses.
- *Health Care.* Private and public health facilities.
- *Correctional.* Detention and correction facilities throughout the world.

Environmental.

- *Water and Wastewater.* Treatment facilities as well as supply, distribution and collection systems, stormwater management, desalinization, and other water re-use technologies.
- *Environmental Management.* Remediation, waste handling, testing and monitoring of environmental conditions and environmental construction management.
- *Water Resources.* Regional-scale floodplain mapping and analysis for public agencies, along with the analysis and development of protected groundwater resources for companies in the bottled water industry.

Energy/Power.

- *Demand Side Management.* Public K-12 schools and universities, health care facilities, and courthouses and other public buildings, as well as energy conservation systems for utilities.
- *Transmission and Distribution.* Power stations and electric transmissions and distribution and co-generation systems.
- *Alternative/Renewable Energy.* Production facilities such as ethanol plants, wind farms and micro hydropower and geothermal subsections of regional power grids.
- *Hydropower/Dams.* Hydroelectric power stations, dams, spillways, and flood control systems.
- *Solar.* Solar photovoltaic projects and environmental permitting services.

Our Construction Services Segment

Through our CS segment, we provide construction, program and construction management services, including building construction and energy, infrastructure and industrial construction, primarily in the Americas.

We provide the services in our CS segment both directly and through joint ventures or similar partner arrangements, to the following end markets and business sectors:

Building. We provide construction, program and construction management services for large scale building and facility construction projects around the world including:

- Sports arenas;
- Modern office and residential towers;
- Hotel and gaming facilities;
- Meeting and exhibition spaces;
- Performance venues;

- Education facilities;
- Mass transit terminals; and
- Data centers.

Energy. We plan, design, engineer, construct, retrofit and maintain a wide range of power-generating facilities, as well as the systems that transmit and distribute electricity. We provide these services to utilities, industrial co-generators, independent power producers, original equipment manufacturers and government utilities including:

- Fossil fuel power generating facilities;
- Nuclear power generating facilities and decommissioning;
- Hydroelectric power generating facilities;
- Alternative and renewable energy sources, including biomass, geothermal, solar energy and wind systems;
- Transmission and distribution systems; and
- Emissions control systems.

We also provide a wide range of planning, design, engineering, construction, production, and operations and maintenance services across the oil and gas upstream, midstream and downstream supply chain. For downstream refining and processing operations, we design and construct gas treatment and processing, refining and petrochemical facilities, and provide asset management and maintenance services for oil sands production facilities, oil refineries and related chemical, energy, power and processing plants. For oil and gas production, we provide construction, fabrication and installation, commissioning and maintenance services for field production facilities, equipment and process modules, site infrastructure and off-site support facilities including:

- Construction of access roads and well pads, and field production facilities;
- Pipeline construction, installation, maintenance and repair; and
- Equipment and process module fabrication, installation and maintenance.

Infrastructure and Industrial. We provide construction, design-build program and construction management services for large scale infrastructure projects around the world including design-build services. We also provide a wide range of engineering, procurement and construction services for industrial and process facilities and the expansion, modification and upgrade of existing facilities. We provide these services to local, state, federal and national governments as well as corporations including:

- Highways, bridges, airports, rail and other transit projects;
- Maritime and terminal facilities;
- Dams, water and waste water projects;
- Industrial production facilities; and
- Mines and mining facilities.

Our Management Services Segment

Through our MS segment, we are a major contractor to the U.S. federal government and we serve a wide variety of government departments and agencies, including the Department of Defense, the Department of Energy (DOE) and other U.S. federal agencies. We also serve departments and agencies of other national governments, such as the U.K. Nuclear Decommissioning Authority (NDA) and the U.K. Ministry of Defense. Our services range from program and facilities management, environmental management, training, logistics, consulting, systems engineering and technical assistance, and systems integration and information technology.

We provide a wide array of classified and unclassified services in our MS segment, both directly and through joint ventures or similar partner arrangements, including:

- Operation and maintenance of complex government installations, including military bases and test ranges;
- Network and communications engineering, software engineering, IT infrastructure design and implementation, cyber defense and cloud computing technologies;
- Deactivation, decommissioning and disposal of nuclear and high hazard waste;
- Management and operations and maintenance services for complex DOE and NDA programs and facilities;
- Testing and development of new components and platforms, as well as engineering and technical support for the modernization of aging weapon systems;
- Logistics support for government supply and distribution networks, including warehousing, packaging, delivery and traffic management;
- Acquisition support for new weapons platforms;
- Maintenance planning to extend the service life of weapons systems and other military equipment;
- Maintenance, modification and overhaul of military aircraft and ground vehicles;
- Safety analyses for high-hazard facilities and licensing for DOE sites;
- Threat assessments of public facilities and the development of force protection and security systems;
- Planning and conducting emergency preparedness exercises;
- First responder training for the military and other government agencies;
- Management and operations and maintenance of chemical agent and chemical weapon disposal facilities;
- Installation of monitoring technology to detect the movement of nuclear and radiological materials across national borders;
- Planning, design and construction of aircraft hangars, barracks, military hospitals and other government buildings; and
- Environmental remediation and restoration for the redevelopment of military bases and other government and commercial installations, including commercial reactor deactivation and demolition.

Our AECOM Capital Segment

ACAP was formed in 2013 and primarily invests in and develops real estate projects. ACAP typically partners with investors and experienced developers as co-general partners. ACAP may, but is not required to, enter into contracts with our other AECOM affiliates to provide design, engineering, construction management, development and operations and maintenance services for ACAP funded projects. ACAP development activity is conducted through joint ventures or subsidiaries that may be consolidated or unconsolidated for financial reporting purposes depending on the extent and nature of our ownership interest. In addition, in connection with the investment activities of ACAP, AECOM or an affiliate may provide guarantees of certain financial obligations, including guarantees for completion of projects, repayment of debt, environmental indemnity obligations and other lender required guarantees. We partnered with Canyon Partners to form a joint registered investment advisor focused on investing in co-general partner equity opportunities in development and value-add commercial real estate projects in the United States.

Our Clients

Our clients consist primarily of national, state, regional and local governments, public and private institutions and major corporations. The following table sets forth our total revenue attributable to these categories of clients for each of the periods indicated:

	Year Ended September 30, ($ in millions)					
	2019		2018		2017	
U.S. Federal Government						
DCS	$ 1,131.3	6 %	$ 957.5	5 %	$ 687.7	4 %
CS	293.9	1	293.4	1	138.4	1
MS	3,842.1	19	3,424.3	17	3,122.3	17
Subtotal U.S. Federal Government	5,267.3	26	4,675.2	23	3,948.4	22
U.S. State and Local Governments	3,256.2	16	3,750.7	19	2,808.1	15
Non-U.S. Governments	2,120.8	11	2,200.6	11	1,980.4	11
Subtotal Governments	10,644.3	53	10,626.5	53	8,736.9	48
Private Entities (worldwide)	9,529.0	47	9,529.0	47	9,466.5	52
Total	$ 20,173.3	100 %	$ 20,155.5	100 %	$ 18,203.4	100 %

Other than the U.S. federal government, no single client accounted for 10% or more of our revenue in any of the past five fiscal years. Approximately 26%, 23% and 22% of our revenue was derived through direct contracts with agencies of the U.S. federal government in the years ended September 30, 2019, 2018 and 2017, respectively. One of these contracts accounted for approximately 3%, 2% and 3% of our revenue in the years ended September 30, 2019, 2018 and 2017, respectively. The work attributed to the U.S. federal government includes our work for the Department of Defense, Department of Energy, Department of Justice and the Department of Homeland Security.

Contracts

The price provisions of the contracts we undertake can be grouped into several broad categories: cost-reimbursable contracts, guaranteed maximum price contracts, and fixed-price contracts.

Cost-Reimbursable Contracts

Cost-reimbursable contracts include cost-plus fixed fee, cost-plus fixed rate, and time-and-materials price contracts. Under cost-plus contracts, we charge clients for our costs, including both direct and indirect costs, plus a negotiated fee or rate. We recognize revenues based on actual direct costs incurred and the applicable fixed rate or portion of the fixed fee earned as of the balance sheet date. Under time-and-materials price contracts, we negotiate hourly billing rates and charge clients based on the actual time we expend on the project. In addition, clients reimburse us for materials and other direct incidental expenditures incurred in connection with our performance under the contract. Time-and-

material price contracts may also have a fixed-price element in the form of not-to-exceed or guaranteed maximum price provisions.

Some cost-plus contracts provide for award fees or a penalty based on performance criteria in lieu of a fixed fee or fixed rate. Other contracts include a base fee component plus a performance-based award fee. In addition, we may share award fees with subcontractors. We generally recognize revenue to the extent of costs actually incurred plus a proportionate amount of the fee expected to be earned. We take the award fee or penalty on contracts into consideration when estimating revenue and profit rates, and record revenue related to the award fees when there is sufficient information to assess anticipated contract performance and a significant reversal of the award fee is not probable. Once an award is received, the estimated or accrued fees are adjusted to the actual award amount.

Some cost-plus contracts provide for incentive fees based on performance against contractual milestones. The amount of the incentive fees varies, depending on whether we achieve above, at, or below target results. We originally recognize revenue on these contracts based upon expected results. These estimates are revised when necessary based upon additional information that becomes available as the contract progresses.

Guaranteed Maximum Price Contracts

Guaranteed maximum price contracts (GMP) share many of the same contract provisions as cost-plus and fixed-price contracts. As with cost-plus contracts, clients are provided a disclosure of all project costs, and a lump sum percentage fee is separately identified. We provide clients with a guaranteed price for the overall project (adjusted for change orders issued by clients) and a schedule including the expected completion date. Cost overruns or costs associated with project delays in completion could generally be our responsibility. For many of our commercial or residential GMP contracts, the final price is generally not established until we have subcontracted a substantial percentage of the trade contracts with terms consistent with the master contract, and we have negotiated additional contract limitations, such as waivers of consequential damages as well as aggregate caps on liabilities and liquidated damages. Revenue is recognized for GMP contracts as project costs are incurred relative to total estimated project costs.

Fixed-Price Contracts

Fixed-price contracts include both lump-sum and fixed-unit price contracts. Under lump-sum contracts, we perform all the work under the contract for a specified fee. Lump-sum contracts are typically subject to price adjustments if the scope of the project changes or unforeseen conditions arise. Under fixed-unit price contracts, we perform a number of units of work at an agreed price per unit with the total payment under the contract determined by the actual number of units delivered. Revenue is recognized for fixed-price contracts using the input method measured on a cost-to-cost basis.

Some of our fixed-price contracts require us to provide surety bonds or parent company guarantees to assure our clients that their project will be completed in accordance with the terms of the contracts as further disclosed in Note 18—Commitments and Contingencies. In such cases, we may require our primary subcontractors to provide similar performance bonds and guarantees and to be adequately insured, and we may flow down the terms and conditions set forth in our agreement on to our subcontractors. There may be risks associated with completing these projects profitably if we are not able to perform our services within the fixed-price contract terms.

For the year ended September 30, 2019, our revenue was comprised of 51%, 20%, and 29% cost-reimbursable, guaranteed maximum price, and fixed-price contracts, respectively.

Joint Ventures

Some of our larger contracts may operate under joint ventures or other arrangements under which we team with other reputable companies, typically companies with which we have worked for many years. This is often done where the scale of the project dictates such an arrangement or when we want to strengthen either our market position or our technical skills.

Backlog

Backlog represents revenue we expect to realize for work completed by our consolidated subsidiaries and our proportionate share of work to be performed by unconsolidated joint ventures. Backlog is expressed in terms of gross revenue and therefore may include significant estimated amounts of third party or pass-through costs to subcontractors and other parties. Backlog for our consolidated subsidiaries is comprised of contracted backlog and awarded backlog. Our contracted backlog includes revenue we expect to record in the future from signed contracts, and in the case of a public client, where the project has been funded. We report transaction price allocated to remaining unsatisfied performance obligations (RUPO) of $23.6 billion, as described in Note 4, Revenue Recognition, in the notes to our consolidated financial statements. The most significant difference between our contracted backlog and RUPO is revenue related to service contracts that extend beyond the termination provision of those contracts. Our contracted backlog includes revenues for service contracts expected to be earned over the term of that contract. Guidance for the calculation of RUPO requires us to assume the contract will be terminated at its earliest convenience, resulting in RUPO to be $0.7 billion lower than contracted backlog. Our awarded backlog includes revenue we expect to record in the future where we have been awarded the work, but the contractual agreement has not yet been signed. The net results of our unconsolidated joint ventures are recognized as equity earnings, and awarded and contracted backlog representing our proportionate share of work to be performed by unconsolidated joint ventures is not presented as revenue in our Consolidated Statements of Operations. For non-government contracts, our backlog includes future revenue at contract rates, excluding contract renewals or extensions that are at the discretion of the client. For contracts with a not-to-exceed maximum amount, we include revenue from such contracts in backlog to the extent of the remaining estimated amount. We calculate backlog without regard to possible project reductions or expansions or potential cancellations until such changes or cancellations occur. No assurance can be given that we will ultimately realize our full backlog. Backlog fluctuates due to the timing of when contracts are awarded and contracted and when contract revenue is recognized. Many of our contracts require us to provide services over more than one year. Our backlog for the year ended September 30, 2019 increased $5.6 billion, or 10.4%, to $59.7 billion as compared to $54.1 billion for the corresponding period last year, primarily due to the increase in our CS segment.

The following summarizes contracted and awarded backlog (in billions):

	September 30,	
	2019	2018
Contracted backlog:		
DCS segment	$ 9.7	$ 9.2
CS segment	10.5	9.3
MS segment	4.1	3.4
Total contracted backlog	$ 24.3	$ 21.9
Awarded backlog:		
DCS segment	$ 6.6	$ 7.5
CS segment	12.5	7.2
MS segment	14.0	14.5
Total awarded backlog	$ 33.1	$ 29.2
Unconsolidated joint venture backlog:		
CS segment	$ 1.3	$ 2.0
MS segment	1.0	1.0
Total unconsolidated joint venture backlog	$ 2.3	$ 3.0
Total backlog:		
DCS segment	$ 16.3	$ 16.7
CS segment	24.3	18.5
MS segment	19.1	18.9
Total backlog	$ 59.7	$ 54.1

Competition

The markets we serve are highly fragmented and we compete with a large number of regional, national and international companies. We have numerous competitors, ranging from small private firms to multi-billion dollar companies, some of which have greater financial resources or that are more specialized and concentrate their resources in particular areas of expertise. The extent of our competition varies according to the particular markets and geographic area. The degree and type of competition we face is also influenced by the type and scope of a particular project. The technical and professional aspects of our services generally do not require large upfront capital expenditures and, therefore, provide limited barriers against new competitors.

We believe that we are well positioned to compete in our markets because of our reputation, our cost effectiveness, our long-term client relationships, our extensive network of offices, our employee expertise, and our broad range of services. In addition, as a result of our extensive national and international network, we are able to offer our clients localized knowledge and expertise, as well as the support of our worldwide professional staff.

Seasonality

We experience seasonal trends in our business. Our revenue is typically higher in the last half of the fiscal year. The fourth quarter of our fiscal year (July 1 to September 30) is typically our strongest quarter. We find that the U.S. federal government tends to authorize more work during the period preceding the end of our fiscal year, September 30. In addition, many U.S. state governments with fiscal years ending on June 30 tend to accelerate spending during their first quarter, when new funding becomes available. Further, our construction management revenue typically increases during the high construction season of the summer months. Within the United States, as well as other parts of the world, our business generally benefits from milder weather conditions in our fiscal fourth quarter, which allows for more productivity from our on-site civil services. Our construction and project management services also typically expand during the high construction season of the summer months. The first quarter of our fiscal year (October 1 to December 31) is typically our lowest revenue quarter. The harsher weather conditions impact our ability to complete work in parts of North America and the holiday season schedule affects our productivity during this period. For these reasons, coupled with the number and significance of client contracts commenced and completed during a particular period, as well as the timing of expenses incurred for corporate initiatives, it is not unusual for us to experience seasonal changes or fluctuations in our quarterly operating results.

Risk Management and Insurance

Risk management is an integral part of our project management approach and our project execution process. We have an Office of Risk Management that reviews and oversees the risk profile of our operations. Also, pursuant to our internal delegations of authority, we have an internal process whereby a group of senior members of our risk management team evaluate risk through internal risk analyses of higher-risk projects, contracts or other business decisions. We maintain insurance covering professional liability and claims involving bodily injury and property damage. Wherever possible, we endeavor to eliminate or reduce the risk of loss on a project through the use of quality assurance/control, risk management, workplace safety and similar methods.

Regulations

Our business is impacted by environmental, health and safety, government procurement, anti-bribery and other government regulations and requirements. Below is a summary of some of the significant regulations that impact our business.

Environmental, Health and Safety. Our business involves the planning, design, program management, construction and construction management, and operations and maintenance at various project sites, including but not limited to pollution control systems, nuclear facilities, hazardous waste and Superfund sites, contract mining sites, hydrocarbon production, distribution and transport sites, military bases and other infrastructure-related facilities. We also regularly perform work, including oil field and pipeline construction services in and around sensitive environmental areas, such as rivers, lakes and wetlands. In addition, we have contracts with U.S. federal government entities to destroy

hazardous materials, including chemical agents and weapons stockpiles, as well as to decontaminate and decommission nuclear facilities. These activities may require us to manage, handle, remove, treat, transport and dispose of toxic or hazardous substances.

Significant fines, penalties and other sanctions may be imposed for non-compliance with environmental and health and safety laws and regulations, and some laws provide for joint and several strict liabilities for remediation of releases of hazardous substances, rendering a person liable for environmental damage, without regard to negligence or fault on the part of such person. These laws and regulations may expose us to liability arising out of the conduct of operations or conditions caused by others, or for our acts that were in compliance with all applicable laws at the time these acts were performed. For example, there are a number of governmental laws that strictly regulate the handling, removal, treatment, transportation and disposal of toxic and hazardous substances, such as the Comprehensive Environmental Response Compensation and Liability Act of 1980, and comparable national and state laws, that impose strict, joint and several liabilities for the entire cost of cleanup, without regard to whether a company knew of or caused the release of hazardous substances. In addition, some environmental regulations can impose liability for the entire clean-up upon owners, operators, generators, transporters and other persons arranging for the treatment or disposal of such hazardous substances related to contaminated facilities or project sites. Other federal environmental, health and safety laws affecting us include, but are not limited to, the Resource Conservation and Recovery Act, the National Environmental Policy Act, the Clean Air Act, the Clean Air Mercury Rule, the Occupational Safety and Health Act, the Toxic Substances Control Act and the Superfund Amendments and Reauthorization Act, as well as other comparable national and state laws. Liabilities related to environmental contamination or human exposure to hazardous substances, comparable national and state laws or a failure to comply with applicable regulations could result in substantial costs to us, including cleanup costs, fines and civil or criminal sanctions, third-party claims for property damage or personal injury, or cessation of remediation activities.

Some of our business operations are covered by Public Law 85-804, which provides for indemnification by the U.S federal government against claims and damages arising out of unusually hazardous or nuclear activities performed at the request of the U.S. federal government. Should public policies and laws change, however, U.S. federal government indemnification may not be available in the case of any future claims or liabilities relating to hazardous activities that we undertake to perform.

Government Procurement. The services we provide to the U.S. federal government are subject to Federal Acquisition Regulation, the Truth in Negotiations Act, Cost Accounting Standards, the Services Contract Act, export controls rules and Department of Defense (DOD) security regulations, as well as many other laws and regulations. These laws and regulations affect how we transact business with our clients and, in some instances, impose additional costs on our business operations. A violation of specific laws and regulations could lead to fines, contract termination or suspension of future contracts. Our government clients can also terminate, renegotiate, or modify any of their contracts with us at their convenience; and many of our government contracts are subject to renewal or extension annually.

Anti-Bribery and other regulations. We are subject to the U.S. Foreign Corrupt Practices Act and similar anti-bribery laws, which generally prohibit companies and their intermediaries from making improper payments to foreign government officials for the purpose of obtaining or retaining business. The U.K. Bribery Act of 2010 prohibits both domestic and international bribery, as well as bribery across both private and public sectors. In addition, an organization that “fails to prevent bribery” committed by anyone associated with the organization can be charged under the U.K. Bribery Act unless the organization can establish the defense of having implemented “adequate procedures” to prevent bribery. To the extent we export technical services, data and products outside of the U.S., we are subject to U.S. and international laws and regulations governing international trade and exports, including but not limited to the International Traffic in Arms Regulations, the Export Administration Regulations and trade sanctions against embargoed countries. We provide services to the DOD and other defense-related entities that often require specialized professional qualifications and security clearances. In addition, as engineering design services professionals, we are subject to a variety of local, state, federal and foreign licensing and permit requirements and ethics rules.

Personnel

Our principal asset is our employees and large percentages of our employees have technical and professional backgrounds and undergraduate and/or advanced degrees. At the end of our fiscal 2019, we employed approximately

86,000 persons, of whom approximately 43,000 were employed in the United States. Over 5,000 of our domestic employees are covered by collective bargaining agreements or by specific labor agreements, which expire upon completion of the relevant project.

Raw Materials

We purchase most of the raw materials and components necessary to operate our business from numerous sources. However, the price and availability of raw materials and components may vary from year to year due to customer demand, production capacity, market conditions and material shortages. While we do not currently foresee the lack of availability of any particular raw materials in the near term, prolonged unavailability of raw materials necessary to our projects and services or significant price increases for those raw materials could have a material adverse effect on our business in the near term.

Government Contracts

Generally, our government contracts are subject to renegotiation or termination of contracts or subcontracts at the discretion of the U.S. federal, state or local governments, and national governments of other countries.

Trade Secrets and Other Intellectual Property

We rely principally on trade secrets, confidentiality policies and other contractual arrangements to protect much of our intellectual property.

Available Information

The reports we file with the Securities and Exchange Commission, including annual reports on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K and proxy materials, including any amendments, are available free of charge on our website at *www.aecom.com* as soon as reasonably practicable after we electronically file such material with, or furnish it to the SEC. The SEC also maintains a web site *(www.sec.gov)* containing reports, proxy and information statements, and other information that we file with the SEC. Our Corporate Governance Guidelines and our Code of Ethics are available on our website at *www.aecom.com* under the “Investors” section. Copies of the information identified above may be obtained without charge from us by writing to AECOM, 1999 Avenue of the Stars, Suite 2600, Los Angeles, California 90067, Attention: Corporate Secretary.

ITEM 1A. RISK FACTORS

We operate in a changing environment that involves numerous known and unknown risks and uncertainties that could materially adversely affect our operations. The risks described below highlight some of the factors that have affected, and in the future could affect our operations. Additional risks we do not yet know of or that we currently think are immaterial may also affect our business operations. If any of the events or circumstances described in the following risks actually occurs, our business, financial condition or results of operations could be materially adversely affected.

A United States federal government shutdown, payment delays or reduced demand for our services may have a material impact on our results of operation and financial condition.

The partial shutdown of the U.S. federal government in 2018 resulted in federal payment delays that negatively impacted our operational cash flow. Another U.S. federal government shutdown of similar or greater duration could significantly reduce demand for our services, delay payment and result in workforce reductions that may have a material adverse effect on our results of operation and financial condition. Moreover, a prolonged government shutdown could result in program cancellations, disruptions and/or stop work orders and could limit the U.S. federal government’s ability to effectively process and our ability to perform on our U.S. government contracts and successfully compete for new work.

Demand for our services is cyclical and may be vulnerable to sudden economic downturns and reductions in government and private industry spending. If economic conditions remain uncertain and/or weaken, our revenue and profitability could be adversely affected.

Demand for our services is cyclical and may be vulnerable to sudden economic downturns, interest rate fluctuations and reductions in government and private industry spending that result in clients delaying, curtailing or canceling proposed and existing projects. For example, commodity price volatility has previously impacted our oil and gas business and business regions whose economies are substantially dependent on commodities prices such as the Middle East and has also impacted North American oil and gas clients' investment decisions.

United States and foreign trade policy actions and tariffs, such as the March 2018 imposition of tariffs on steel and aluminum imports, could impact client spending and affect the profitability of our fixed-price construction projects. Where economies are weakening, our clients may demand more favorable pricing or other terms while their ability to pay our invoices or to pay them in a timely manner may be adversely affected. Our government clients may face budget deficits that prohibit them from funding proposed and existing projects. If economic conditions remain uncertain and/or weaken and/or government spending is reduced, our revenue and profitability could be adversely affected.

We depend on long-term government contracts, some of which are only funded on an annual basis. If appropriations for funding are not made in subsequent years of a multiple-year contract, we may not be able to realize all of our anticipated revenue and profits from that project.

A substantial portion of our revenue is derived from contracts with agencies and departments of national, state and local governments. During fiscal 2019 and 2018, approximately 53% and 53%, respectively, of our revenue was derived from contracts with government entities.

Most government contracts are subject to the government's budgetary approval process. Legislatures typically appropriate funds for a given program on a year-by-year basis, even though contract performance may take more than one year. In addition, public-supported financing such as state and local municipal bonds may be only partially raised to support existing infrastructure projects. As a result, at the beginning of a program, the related contract is only partially funded, and additional funding is normally committed only as appropriations are made in each fiscal year. These appropriations, and the timing of payment of appropriated amounts, may be influenced by, among other things, the state of the economy, a government shutdown, competing priorities for appropriation, changes in administration or control of legislatures and the timing and amount of tax receipts and the overall level of government expenditures. Similarly, the impact of an economic downturn on state and local governments may make it more difficult for them to fund infrastructure projects. If appropriations are not made in subsequent years on our government contracts, then we will not realize all of our potential revenue and profit from that contract.

If we are unable to win or renew government contracts during regulated procurement processes, our operations and financial results would be harmed.

Government contracts are awarded through a regulated procurement process. The federal government has awarded multi-year contracts with pre-established terms and conditions, such as indefinite delivery contracts, that generally require those contractors that have previously been awarded the indefinite delivery contract to engage in an additional competitive bidding process before a task order is issued. In addition, the federal government has also awarded federal contracts based on a low-price, technically acceptable criteria emphasizing price over qualitative factors, such as past performance. As a result of these competitive pricing pressures, our profit margins on future federal contracts may be reduced and may require us to make sustained efforts to reduce costs in order to realize revenues and profits under government contracts. If we are not successful in reducing the amount of costs we incur, our profitability on government contracts will be negatively impacted. In addition, we may not be awarded government contracts because of existing government policies designed to protect small businesses and under-represented minority contractors. Our inability to win or renew government contracts during regulated procurement processes could harm our operations and reduce our profits and revenues.

Governmental agencies may modify, curtail or terminate our contracts at any time prior to their completion and, if we do not replace them, we may suffer a decline in revenue.

Most government contracts may be modified, curtailed or terminated by the government either at its discretion or upon the default of the contractor. If the government terminates a contract at its discretion, then we typically are able to recover only costs incurred or committed, settlement expenses and profit on work completed prior to termination, which could prevent us from recognizing all of our potential revenue and profits from that contract. In addition, for some assignments, the U.S. government may attempt to "insource" the services to government employees rather than outsource to a contractor. If a government terminates a contract due to our default, we could be liable for excess costs incurred by the government in obtaining services from another source.

Our contracts with governmental agencies are subject to audit, which could result in adjustments to reimbursable contract costs or, if we are charged with wrongdoing, possible temporary or permanent suspension from participating in government programs.

Our books and records are subject to audit by the various governmental agencies we serve and their representatives. These audits can result in adjustments to the amount of contract costs we believe are reimbursable by the agencies and the amount of our overhead costs allocated to the agencies. If such matters are not resolved in our favor, they could have a material adverse effect on our business. In addition, if one of our subsidiaries is charged with wrongdoing as a result of an audit, that subsidiary, and possibly our company as a whole, could be temporarily suspended or could be prohibited from bidding on and receiving future government contracts for a period of time. Furthermore, as a government contractor, we are subject to an increased risk of investigations, criminal prosecution, civil fraud actions, whistleblower lawsuits and other legal actions and liabilities to which purely private sector companies are not, the results of which could materially adversely impact our business. For example, a qui tam lawsuit related to an affiliate was unsealed in 2016. Qui tam lawsuits typically allege that we have made false statements or certifications in connection with claims for payment, or improperly retained overpayments, from the government. These suits may remain under seal (and hence, be unknown to us) for some time while the government decides whether to intervene on behalf of the qui tam plaintiff.

Our substantial leverage and significant debt service obligations could adversely affect our financial condition and our ability to fulfill our obligations and operate our business.

We had approximately $3.4 billion of indebtedness (excluding intercompany indebtedness) outstanding as of September 30, 2019, of which $1.4 billion was secured obligations (exclusive of $22.8 million of outstanding undrawn letters of credit) and we have an additional $1.3 billion of availability under our Credit Agreement (after giving effect to outstanding letters of credit), all of which would be secured debt, if drawn. Our financial performance could be adversely affected by our substantial leverage. We may also incur significant additional indebtedness in the future, subject to various conditions.

This high level of indebtedness could have important negative consequences to us, including, but not limited to:

- we may have difficulty satisfying our obligations with respect to outstanding debt obligations;
- we may have difficulty obtaining financing in the future for working capital, acquisitions, capital expenditures or other purposes;
- we may need to use all, or a substantial portion, of our available excess cash flow to pay interest and principal on our debt, which will reduce the amount of money available to finance our operations and other business activities, including, but not limited to, working capital requirements, acquisitions, capital expenditures or other general corporate or business activities;
- our debt level increases our vulnerability to general economic downturns and adverse industry conditions;
- our debt level could limit our flexibility in planning for, or reacting to, changes in our business and in our

industry in general;

- our substantial amount of debt and the amount we must pay to service our debt obligations could place us at a competitive disadvantage compared to our competitors that have less debt;
- we may have increased borrowing costs;
- our clients, surety providers or insurance carriers may react adversely to our significant debt level;
- we may have insufficient funds, and our debt level may also restrict us from raising the funds necessary, to retire our debt instruments tendered to us upon maturity of our debt or the occurrence of a change of control, which would constitute an event of default under our debt instruments; and
- our failure to comply with the financial and other restrictive covenants in our debt instruments which, among other things, require us to maintain specified financial ratios and limit our ability to incur debt and sell assets, could result in an event of default that, if not cured or waived, could have a material adverse effect on our business or prospects.

Our high level of indebtedness requires that we use a substantial portion of our cash flow from operations to pay principal of, and interest on, our indebtedness, which will reduce the availability of cash to fund working capital requirements, future acquisitions, capital expenditures or other general corporate or business activities.

In addition, a portion of our indebtedness bears interest at variable rates, including borrowings under our Credit Agreement. If market interest rates increase, debt service on our variable-rate debt will rise, which could adversely affect our cash flow, results of operations and financial position. Although we may employ hedging strategies such that a portion of the aggregate principal amount of our term loans carries a fixed rate of interest, any hedging arrangement put in place may not offer complete protection from this risk. Additionally, the remaining portion of borrowings under our Credit Agreement that is not hedged will be subject to changes in interest rates.

The agreements governing our debt contain a number of restrictive covenants which will limit our ability to finance future operations, acquisitions or capital needs or engage in other business activities that may be in our interest.

The Credit Agreement and the indentures governing our debt contain a number of significant covenants that impose operating and other restrictions on us and our subsidiaries. Such restrictions affect or will affect, and in many respects limit or prohibit, among other things, our ability and the ability of some of our subsidiaries to:

- incur additional indebtedness;
- create liens;
- pay dividends and make other distributions in respect of our equity securities;
- redeem or repurchase our equity securities;
- distribute excess cash flow from foreign to domestic subsidiaries;
- make investments or other restricted payments;
- sell assets;
- enter into transactions with affiliates; and
- effect mergers or consolidations.

In addition, our Credit Agreement also requires us to comply with a consolidated interest coverage ratio and consolidated leverage ratio. Our ability to comply with these ratios may be affected by events beyond our control.

These restrictions could limit our ability to plan for or react to market or economic conditions or meet capital needs or otherwise restrict our activities or business plans, and could adversely affect our ability to finance our operations, acquisitions, investments or strategic alliances or other capital needs or to engage in other business activities that would be in our interest.

A breach of any of these covenants or our inability to comply with the required financial ratios could result in a default under our debt instruments. If an event of default occurs, our creditors could elect to:

- declare all borrowings outstanding, together with accrued and unpaid interest, to be immediately due and payable;
- require us to apply all of our available cash to repay the borrowings; or
- prevent us from making debt service payments on our borrowings.

If we were unable to repay or otherwise refinance these borrowings when due, the applicable creditors could sell the collateral securing some of our debt instruments, which constitutes substantially all of our domestic and foreign, wholly owned subsidiaries' assets.

Our variable rate indebtedness subjects us to interest rate risk, which could cause our debt service obligations to increase significantly.

Borrowings under our Credit Agreement are at variable rates of interest and expose us to interest rate risk. If interest rates increase, our debt service obligations on the variable rate indebtedness will increase even though the amount borrowed remains the same, and our net income and cash flows, including cash available for servicing our indebtedness, will correspondingly decrease. A 1.00% increase in such interest rates would increase total interest expense under our Credit Agreement for the year ended September 30, 2019 by $15.2 million, including the effect of our interest rate swaps. We may, from time to time, enter into additional interest rate swaps that involve the exchange of floating for fixed rate interest payments in order to reduce interest rate volatility. However, we may not maintain interest rate swaps with respect to all of our variable rate indebtedness, and any swaps we enter into may not fully mitigate our interest rate risk and could be subject to credit risk themselves.

If we are unable to continue to access credit on acceptable terms, our business may be adversely affected.

The changing nature of the global credit markets could make it more difficult for us to access funds, refinance our existing indebtedness, enter into agreements for uncommitted debt bond facilities and new indebtedness, replace our existing revolving and term credit agreements or obtain funding through the issuance of our securities. We use credit facilities to support our working capital and other needs. There is no guarantee that we can continue to renew our credit facility on terms as favorable as those in our existing credit facility and, if we are unable to do so, our costs of borrowing and our business may be adversely affected.

The Budget Control Act of 2011 could significantly reduce U.S. government spending for the services we provide.

Under the Budget Control Act of 2011, an automatic sequestration process, or across-the-board budget cuts (half of which were defense-related), was triggered when the Joint Select Committee on Deficit Reduction, a committee of twelve members of Congress, failed to agree on a deficit reduction plan for the U.S. federal budget. The Bipartisan Budget Act (BBA) of 2019 eliminates sequestration on discretionary accounts in 2020 and 2021 by increasing federal discretionary spending limits until 2021. The BBA also temporarily suspends the public debt limit through July 31, 2021. However, the Budget Control Act of 2011 remains in place, extended through 2029 and absent additional legislative or other remedial action, the sequestration could require reduced U.S. federal government spending from fiscal 2022 through fiscal 2029. A significant reduction in federal government spending or a change in budgetary priorities could reduce demand for our

services, cancel or delay federal projects, and result in the closure of federal facilities and significant personnel reductions, which could have a material adverse effect on our results of operations and financial condition.

The uncertainty surrounding the implementation of, and effects of, the United Kingdom's proposed withdrawal from the European Union could have an adverse effect on our business and financial results.

In March 2017, the United Kingdom government initiated a process to withdraw from the European Union (Brexit) and began negotiating the terms of its separation. A withdrawal without a trade agreement in place could significantly disrupt the free movement of goods, services, and people between the United Kingdom and the European Union, and result in increased legal and regulatory complexities, as well as potential higher costs of conducting business in Europe. Further, the uncertainty surrounding Brexit has created substantial economic and political uncertainty and volatility in currency exchange rates. Our United Kingdom business is a significant part of our European operations with approximately 7,000 employees and revenues representing approximately 4% of our total revenue for the fiscal year ended September 30, 2019. The uncertainty created by Brexit may cause our customers to closely monitor their costs and reduce demand for our services and may ultimately result in new regulatory and cost challenges for our United Kingdom and global operations. Any of these events could adversely affect our United Kingdom, European and overall business and financial results.

Our operations worldwide expose us to legal, political and economic risks in different countries as well as currency exchange rate fluctuations that could harm our business and financial results.

During fiscal 2019, revenue attributable to our services provided outside of the United States to non-U.S. clients was approximately 26% of our total revenue. There are risks inherent in doing business internationally, including:

- imposition of governmental controls and changes in laws, regulations or policies;
- political and economic instability, such as in the Middle East and South East Asia;
- civil unrest, acts of terrorism, force majeure, war, or other armed conflict;
- changes in U.S. and other national government trade policies affecting the markets for our services, such as recent retaliatory tariffs between the United States and China;
- recent political unrest in Hong Kong where AECOM has a significant presence;
- changes in regulatory practices, tariffs and taxes, such as Brexit;
- potential non-compliance with a wide variety of laws and regulations, including anti-corruption, export control and anti-boycott laws and similar non-U.S. laws and regulations;
- changes in labor conditions;
- logistical and communication challenges; and
- currency exchange rate fluctuations, devaluations and other conversion restrictions.

Any of these factors could have a material adverse effect on our business, results of operations or financial condition.

In addition, Saudi Arabia, the United Arab Emirates (UAE), Bahrain and Egypt have cut diplomatic ties and restricted business with Qatar by closing off access to that country with an air, sea and land traffic embargo. During the economic embargo, products cannot be shipped directly to Qatar from the UAE, Saudi Arabia or Bahrain and financial services may be limited. Our Qatarian business is a significant part of our Middle East operations with approximately

several hundred employees. The economic embargo may make it difficult to complete ongoing Qatarian projects and could reduce future demand for our services.

We operate in many different jurisdictions and we could be adversely affected by violations of the U.S. Foreign Corrupt Practices Act and similar worldwide anti-corruption laws.

The U.S. Foreign Corrupt Practices Act (FCPA) and similar worldwide anti-corruption laws, including the U.K. Bribery Act of 2010, generally prohibit companies and their intermediaries from making improper payments to non-U.S. officials for the purpose of obtaining or retaining business. Our internal policies mandate compliance with these anti-corruption laws, including the requirements to maintain accurate information and internal controls which may fall within the purview of the FCPA, its books and records provisions or its anti-bribery provisions. We operate in many parts of the world that have experienced governmental corruption to some degree; and, in some circumstances, strict compliance with anti-corruption laws may conflict with local customs and practices. Despite our training and compliance programs, we cannot assure that our internal control policies and procedures always will protect us from reckless or criminal acts committed by our employees or agents. In addition, from time to time, government investigations of corruption in construction-related industries affect us and our peers. Violations of these laws, or allegations of such violations, could disrupt our business and result in a material adverse effect on our results of operations or financial condition.

We work in international locations where there are high security risks, which could result in harm to our employees and contractors or material costs to us.

Some of our services are performed in high-risk locations, such as the Middle East, Africa, and Southwest Asia, where the country or location is suffering from political, social or economic problems, or war or civil unrest. In those locations where we have employees or operations, we may incur material costs to maintain the safety of our personnel. Despite these precautions, the safety of our personnel in these locations may continue to be at risk. Acts of terrorism and threats of armed conflicts in or around various areas in which we operate could limit or disrupt markets and our operations, including disruptions resulting from the evacuation of personnel, cancellation of contracts, or the loss of key employees, contractors or assets.

Many of our project sites are inherently dangerous workplaces. Failure to maintain safe work sites and equipment could result in environmental disasters, employee deaths or injuries, reduced profitability, the loss of projects or clients and possible exposure to litigation.

Our project sites often put our employees and others in close proximity with mechanized equipment, moving vehicles, chemical and manufacturing processes, and highly regulated materials. On some project sites, we may be responsible for safety and, accordingly, we have an obligation to implement effective safety procedures. If we fail to implement these procedures or if the procedures we implement are ineffective, we may suffer the loss of or injury to our employees, as well as expose ourselves to possible litigation. As a result, our failure to maintain adequate safety standards and equipment could result in reduced profitability or the loss of projects or clients, and could have a material adverse impact on our business, financial condition, and results of operations.

Cybersecurity threats, information technology systems outages and data privacy incidents could adversely harm our business.

We develop, install and maintain information technology systems for our clients and employees. We may experience errors, outages, or delays of service in our information technology systems, which could significantly disrupt our operations, impact our clients and employees, damage our reputation, and result in litigation and regulatory fines or penalties. Client contracts for the performance of information technology services, primarily with the federal government, as well as various privacy and securities laws pertaining to client and employee usage, require us to manage and protect sensitive and proprietary information. For example, the European's Union General Data Protection Regulation extends the scope of the European Union data protection laws to all companies processing data of European Union residents, regardless of the company's location. In addition, the California Consumer Privacy Act increased the penalties for data privacy incidents.

We face threats to our information technology systems, including unauthorized access, computer hackers, computer viruses, malicious code, cyber-attacks, phishing and other cybersecurity problems and system disruptions, including possible unauthorized access to our and our clients' proprietary information. We rely on industry-accepted security measures and technology to securely maintain all proprietary information on our information technology systems. In the ordinary course of business, we have been targeted by malicious cyber-attacks. Anyone who circumvents our security measures could misappropriate proprietary information, including information regarding us, our employees and/or our clients, or cause interruptions in our operations. Although we devote significant resources to our cybersecurity programs and have implemented security measures to protect our systems and to prevent, detect and respond to cybersecurity incidents, there can be no assurance that our efforts will prevent these threats. As these security threats continue to evolve, we may be required to devote additional resources to protect, prevent, detect and respond against system disruptions and security breaches.

We also rely in part on third-party software and information technology vendors to run our critical accounting, project management and financial information systems. We depend on our software and information technology vendors to provide long-term software and hardware support for our information systems. Our software and information technology vendors may decide to discontinue further development, integration or long-term software and hardware support for our information systems, in which case we may need to abandon one or more of our current information systems and migrate some or all of our accounting, project management and financial information to other systems, thus increasing our operational expense, as well as disrupting the management of our business operations.

Any of these events could damage our reputation and have a material adverse effect on our business, financial condition, results of operations and cash flows. Furthermore, while we maintain insurance, that specifically cover these attacks, our coverage may not sufficiently cover all types of losses or claims that may arise.

An impairment charge of goodwill could have a material adverse impact on our financial condition and results of operations.

Because we have grown in part through acquisitions, goodwill and intangible assets-net represent a substantial portion of our assets. Under generally accepted accounting principles in the United States (GAAP), we are required to test goodwill carried in our Consolidated Balance Sheets for possible impairment on an annual basis based upon a fair value approach and whenever events occur that indicate impairment could exist. These events or circumstances could include a significant change in the business climate, including a significant sustained decline in a reporting unit's market value, legal factors, operating performance indicators, competition, sale or disposition of a significant portion of our business, a significant sustained decline in our market capitalization and other factors. For example, in the year ended September 30, 2019, we recorded a noncash impairment of long-lived assets, including goodwill of $615.4 million primarily related to a decrease in the estimated recovery and fair value of reporting units with self-performed at-risk construction exposure in the CS segment.

In addition, if we experience a decrease in our stock price and market capitalization over a sustained period, we could have to record an impairment charge in the future. The amount of any impairment could be significant and could have a material adverse impact on our financial condition and results of operations for the period in which the charge is taken.

Our business and operating results could be adversely affected by losses under fixed-price or guaranteed maximum price contracts.

Fixed-price contracts require us to either perform all work under the contract for a specified lump-sum or to perform an estimated number of units of work at an agreed price per unit, with the total payment determined by the actual number of units performed. In addition, we may enter guaranteed maximum price contracts where we guarantee a price or delivery date. For the year ended September 30, 2019, our revenue was comprised of 51%, 20%, and 29% cost-reimbursable, guaranteed maximum price, and fixed-price contracts, respectively. Fixed-price contracts expose us to a number of risks not inherent in cost-reimbursable contracts, including underestimation of costs, ambiguities in specifications, unforeseen increases in or failures in estimating the cost of raw materials, equipment or labor, problems with new technologies, delays beyond our control, fluctuations in profit margins, failures of subcontractors to perform and

economic or other changes that may occur during the contract period. United States and foreign trade policy actions and tariffs such as the 2018 tariffs on steel and aluminum imports in the United States could affect the profitability of our fixed-price construction projects. Losses under fixed-price or guaranteed contracts could be substantial and adversely impact our results of operations.

Our failure to meet contractual schedule or performance requirements that we have guaranteed could adversely affect our operating results.

In some circumstances, we can incur liquidated or other damages if we do not achieve project completion by a scheduled date. If we or an entity for which we have provided a guarantee subsequently fails to complete the project as scheduled and the matter cannot be satisfactorily resolved with the client, we may be responsible for cost impacts to the client resulting from any delay or the cost to complete the project. Our costs generally increase from schedule delays and/or could exceed our projections for a particular project. In addition, project performance can be affected by a number of factors beyond our control, including unavoidable delays from governmental inaction, public opposition, inability to obtain financing, weather conditions, unavailability of vendor materials, changes in the project scope of services requested by our clients, industrial accidents, environmental hazards, labor disruptions and other factors. Material performance problems for existing and future contracts could cause actual results of operations to differ from those anticipated by us and also could cause us to suffer damage to our reputation within our industry and client base.

We may not be able to maintain adequate surety and financial capacity necessary for us to successfully bid on and win contracts.

In line with industry practice, we are often required to provide surety bonds, standby letters of credit or corporate guarantees to our clients that indemnify the customer should our affiliate fail to perform its obligations under the terms of a contract. As of September 30, 2019 and September 30, 2018, we were contingently liable for $4.8 billion and $5.3 billion, respectively, in issued surety bonds primarily to support project execution and we had outstanding letters of credit totaling $493.7 million and $515.1 million, respectively. A surety may issue a performance or payment bond to guarantee to the client that our affiliate will perform under the terms of a contract. If our affiliate fails to perform under the terms of the contract, then the client may demand that the surety or another corporate affiliate provide the contracted services. In addition, we would typically have obligations to indemnify the surety for any loss incurred in connection with the bond. If a surety bond or a letter of credit is required for a particular project and we are unable to obtain an appropriate surety bond or letter of credit, we may not be able to pursue that project, which in turn could have a material adverse impact on our business, financial condition, results of operations, and cash flows.

We conduct a portion of our operations through joint venture entities, over which we may have limited control.

Approximately 14% of our fiscal 2019 revenue was derived from our operations through joint ventures or similar partnership arrangements, where control may be shared with unaffiliated third parties. As with most joint venture arrangements, differences in views among the joint venture participants may result in delayed decisions or disputes. We also cannot control the actions of our joint venture partners and we typically have joint and several liability with our joint venture partners under the applicable contracts for joint venture projects. These factors could potentially adversely impact the business and operations of a joint venture and, in turn, our business and operations.

Operating through joint ventures in which we are minority holders results in us having limited control over many decisions made with respect to projects and internal controls relating to projects. Sales of our services provided to our unconsolidated joint ventures were approximately 2% of our fiscal 2019 revenue. We generally do not have control of these unconsolidated joint ventures. These joint ventures may not be subject to the same requirements regarding internal controls and internal control over financial reporting that we follow. As a result, internal control problems may arise with respect to these joint ventures, which could have a material adverse effect on our financial condition and results of operations and could also affect our reputation in the industries we serve.

We participate in joint ventures where we provide guarantees and may be adversely impacted by the failure of the joint venture or its participants to fulfill their obligations.

We have investments in and commitments to joint ventures with unrelated parties, including in connection with construction services, government services, and the investment activities of ACAP. For example, real estate and infrastructure joint ventures are inherently risky and may result in future losses since real estate markets are impacted by economic trends and government policies that we do not control. These joint ventures from time to time may borrow money to help finance their activities and in some circumstances, we are required to provide guarantees of obligations of our affiliated entities. In addition, in connection with the investment activities of ACAP, we provide guarantees of obligations, including guarantees for completion of projects, repayment of debt, environmental indemnity obligations and other lender required guarantees. If these entities are not able to honor their obligations under the guarantees, we may be required to expend additional resources or suffer losses, which could be significant.

AECOM Capital's real estate development and investment activities are inherently risky and may result in a future loss.

ACAP's real estate business involves managing, sponsoring, investing and developing commercial real estate projects (Real Estate Joint Ventures) that are inherently risky and may result in future losses since real estate markets are significantly impacted by economic trends and government policies that we do not control. Our registered investment adviser jointly manages, sponsors and owns an equity interest with its co-partner in the AECOM-Canyon Equity Fund, L.P. (the "Fund"), which invests and develops Real Estate Joint Ventures on behalf of its investors. Real Estate Joint Ventures rely on substantial amounts of third party borrowing to finance their development activities including completion guarantees, repayment guarantees, environmental indemnities and other lender required credit support guarantees that may be provided by AECOM or an affiliate to secure the Real Estate Joint Venture financing. Although the Fund and the Real Estate Venture have reserves that will be used to share Real Estate Joint Venture cost overruns, if such reserves are depleted, then AECOM may be required to make support payments to fund non-budgeted cost overruns on behalf of the Fund (but not on behalf of the Fund's co-partner or any unaffiliated Real Estate Joint Venture limited partners). Some of the Fund's limited partners may be permitted to make additional equity co-investments in certain Real Estate Joint Ventures for which AECOM will provide support payments, after additional specific reserves have been depleted, on behalf of the limited partner co-investor in the event of a Real Estate Joint Venture cost overrun. AECOM's provision of lender guarantees is contingent upon the Real Estate Joint Venture meeting AECOM's underwriting criteria, including an affiliate of AECOM acting as either the construction manager at risk or the owner's representative for the project, no material adverse change in AECOM's financial condition, and the guarantee not violating a covenant under a material AECOM agreement.

Misconduct by our employees, partners or consultants or our failure to comply with laws or regulations applicable to our business could cause us to lose customers or lose our ability to contract with government agencies.

As a government contractor, misconduct, fraud or other improper activities caused by our employees', partners' or consultants' failure to comply with laws or regulations could have a significant negative impact on our business and reputation. Such misconduct could include the failure to comply with procurement regulations, environmental regulations, regulations regarding the protection of sensitive government information, legislation regarding the pricing of labor and other costs in government contracts, regulations on lobbying or similar activities, and anti-corruption, anti-competition, export control and other applicable laws or regulations. Our failure to comply with applicable laws or regulations, misconduct by any of our employees or consultants or our failure to make timely and accurate certifications to government agencies regarding misconduct or potential misconduct could subject us to fines and penalties, loss of government granted eligibility, cancellation of contracts and suspension or debarment from contracting with government agencies, any of which may adversely affect our business.

We may be required to contribute additional cash to meet our significant underfunded benefit obligations associated with pension benefit plans we manage or multiemployer pension plans in which we participate.

We have defined benefit pension plans for employees in the United States, United Kingdom, Canada, Australia, and Ireland. At September 30, 2019, our defined benefit pension plans had an aggregate deficit (the excess of projected benefit obligations over the fair value of plan assets) of approximately $483.9 million. In the future, our pension deficits may increase or decrease depending on changes in the levels of interest rates, pension plan performance and other factors

that may require us to make additional cash contributions to our pension plans and recognize further increases in our net pension cost to satisfy our funding requirements. If we are forced or elect to make up all or a portion of the deficit for unfunded benefit plans, our results of operations could be materially and adversely affected.

A multiemployer pension plan is typically established under a collective bargaining agreement with a union to cover the union-represented workers of various unrelated companies. Our collective bargaining agreements with unions will require us to contribute to various multiemployer pension plans; however, we do not control or manage these plans. For the year ended September 30, 2019, we contributed $52.3 million to multiemployer pension plans. Under the Employee Retirement Income Security Act, an employer who contributes to a multiemployer pension plan, absent an applicable exemption, may also be liable, upon termination or withdrawal from the plan, for its proportionate share of the multiemployer pension plan's unfunded vested benefit. If we terminate or withdraw from a multiemployer plan, absent an applicable exemption (such as for some plans in the building and construction industry), we could be required to contribute a significant amount of cash to fund the multiemployer plan's unfunded vested benefit, which could materially and adversely affect our financial results; however, since we do not control the multiemployer plans, we are unable to estimate any potential contributions that could be required.

New legal requirements could adversely affect our operating results.

Our business and results of operations could be adversely affected by the passage of climate change, defense, environmental, infrastructure and other laws, policies and regulations. Growing concerns about climate change and greenhouse gases, such as those adopted under the United Nations COP-21 Paris Agreement may result in the imposition of additional environmental regulations for our clients' fossil fuel projects. For example, legislation, international protocols, regulation or other restrictions on emissions regulations could increase the costs of projects for our clients or, in some cases, prevent a project from going forward, thereby potentially reducing the need for our services. In addition, relaxation or repeal of laws and regulations, or changes in governmental policies regarding environmental, defense, infrastructure or other industries we serve could result in a decline in demand for our services, which could in turn negatively impact our revenues. We cannot predict when or whether any of these various proposals may be enacted or what their effect will be on us or on our customers.

We may be subject to substantial liabilities under environmental laws and regulations.

Our services are subject to numerous environmental protection laws and regulations that are complex and stringent. Our business involves in part the planning, design, program management, construction and construction management, and operations and maintenance at various sites, including but not limited to, pollution control systems, nuclear facilities, hazardous waste and Superfund sites, contract mining sites, hydrocarbon production, distribution and transport sites, military bases and other infrastructure-related facilities. We also regularly perform work, including construction services in and around sensitive environmental areas, such as rivers, lakes and wetlands. In addition, we have contracts in support of U.S. federal government entities to destroy hazardous materials, including chemical agents and weapons stockpiles, as well as to decontaminate and decommission nuclear facilities. These activities may require us to manage, handle, remove, treat, transport and dispose of toxic or hazardous substances. We also own and operate several properties in the U.S. and Canada that have been used for the storage and maintenance of construction equipment. In the conduct of operations on these properties, and despite precautions having been taken, it is possible that there have been accidental releases of individually relatively small amounts of fuel, oils, hydraulic fluids and other fluids while storing or servicing this equipment. Such accidental releases though individually relatively small may have accumulated over time. Past business practices at companies that we have acquired may also expose us to future unknown environmental liabilities.

Significant fines, penalties and other sanctions may be imposed for non-compliance with environmental laws and regulations, and some environmental laws provide for joint and several strict liabilities for remediation of releases of hazardous substances, rendering a person liable for environmental damage, without regard to negligence or fault on the part of such person. These laws and regulations may expose us to liability arising out of the conduct of operations or conditions caused by others, or for our acts that were in compliance with all applicable laws at the time these acts were performed. For example, there are a number of governmental laws that strictly regulate the handling, removal, treatment, transportation and disposal of toxic and hazardous substances, such as Comprehensive Environmental Response Compensation and Liability Act of 1980, and comparable state laws, that impose strict, joint and several liabilities for the

entire cost of cleanup, without regard to whether a company knew of or caused the release of hazardous substances. In addition, some environmental regulations can impose liability for the entire cleanup upon owners, operators, generators, transporters and other persons arranging for the treatment or disposal of such hazardous substances related to contaminated facilities or project sites. Other federal environmental, health and safety laws affecting us include, but are not limited to, the Resource Conservation and Recovery Act, the National Environmental Policy Act, the Clean Air Act, the Clean Air Mercury Rule, the Occupational Safety and Health Act, the Toxic Substances Control Act and the Superfund Amendments and Reauthorization Act and the Energy Reorganization Act of 1974, as well as other comparable national and state laws. Liabilities related to environmental contamination or human exposure to hazardous substances, or a failure to comply with applicable regulations could result in substantial costs to us, including cleanup costs, fines and civil or criminal sanctions, third-party claims for property damage or personal injury or cessation of remediation activities. Our continuing work in the areas governed by these laws and regulations exposes us to the risk of substantial liability.

Demand for our oil and gas services fluctuates.

Demand for our oil and natural gas services fluctuates, and we depend on our customers' willingness to make future expenditures to explore for, develop and produce oil and natural gas in the U.S. and Canada. For example, the past volatility in the price of oil and natural gas has significantly decreased existing and future projects. Our customers' willingness to undertake future projects depends largely upon prevailing industry conditions that are influenced by numerous factors over which we have no control, such as the anticipated future prices for natural gas and crude oil.

The proposed sale of our Management Services business is subject to various risks and uncertainties, may not be completed in accordance with expected plans or on the currently contemplated timeline, or at all, and we may not achieve any or all the intended benefits of the sale.

On October 12, 2019, AECOM entered into a purchase and sale agreement with an affiliate of American Securities LLC and Lindsay Goldberg LLC to sell Management Services for a purchase price of $2.405 billion, subject to customary cash, debt and working capital adjustments. The transaction is expected to close in the first half of fiscal 2020; however, unanticipated developments could delay or prevent consummation of the proposed sale. The consummation of the sale is subject to customary closing conditions. Whether or not the sale is completed, our businesses may face material challenges, including, without limitation:

- the diversion of senior management's attention from ongoing business concerns and overall impact on our business because of senior management's attention to the sale;
- maintaining employee morale and retaining key management and other employees;
- uncertainties as to the timing of the consummation of the sale or whether it will be completed;
- the risk that any consents or regulatory or other approvals required in connection with the sale will not be received or obtained within the expected time frame, on the expected terms at all;
- dis-synergy costs, costs of restructuring transactions (including taxes) and other significant costs and expenses; and
- potential negative reactions from the financial markets if we fail to complete the sale as currently expected, within the anticipated time frame or at all.

Any of these factors could have a material adverse effect on our business, financial condition, results of operations, cash flows and/or the price of our common stock.

If the Management Services sale is completed, AECOM will be a smaller, less diversified company than as it exists today.

The sale of Management Services will result in AECOM being a smaller, less diversified company with more limited businesses concentrated in its areas of focus. For example, following the expected sale, AECOM will be significantly more reliant on our remaining business segments. As a result, AECOM may be more vulnerable to changing market conditions, which could have a material adverse effect on its business, financial condition and results of operations. The diversification of revenues, costs, and cash flows will diminish as a result of the sale, such that AECOM's results of operations, cash flows, working capital, effective tax rate, and financing requirements may be subject to increased volatility and its ability to fund capital expenditures, investments and service debt may be diminished. If the sale is completed, AECOM will incur ongoing costs and retain certain legal claims that were previously allocated to the Management Services business. Those costs may exceed our estimates or could diminish the benefits we expect to realize from the proposed sale.

We may be unable to successfully execute or effectively integrate acquisitions and divestitures may not occur as planned.

We regularly review our portfolio of businesses and pursue growth through acquisitions and seek to divest non-core businesses. We may not be able to complete transactions on favorable terms, on a timely basis, or at all, and during the integration of any acquisition, we may discover regulatory and compliance issues. In addition, our results of operations and cash flows may be adversely impacted by (i) the failure of acquired businesses to meet or exceed expected returns; (ii) the failure to integrate acquired businesses on schedule and/or to achieve expected synergies; (iii) the inability to dispose of non-core assets and businesses on satisfactory terms and conditions; (iv) diversion of attention and increased burdens on our employees; and (v) the discovery of unanticipated liabilities or other problems in acquired businesses for which we lack contractual protections, insurance or indemnities, or with regard to divested businesses, claims by purchasers to whom we have provided contractual indemnification. Additional difficulties we may encounter as part of the integration process include the following:

- the consequences of a change in tax treatment and the possibility that the full benefits anticipated from the acquisition or disposition will not be realized;
- any delay in the integration or disposition of management teams, strategies, operations, products and services;
- differences in business backgrounds, corporate cultures and management philosophies that may delay successful integration;
- the ability to retain key employees;
- the ability to create and enforce uniform standards, controls, procedures, policies and information systems;
- the challenge of restructuring complex systems, technology, networks and other assets in a seamless manner that minimizes any adverse impact on customers, suppliers, employees and other constituencies;
- potential unknown liabilities and unforeseen increased expenses or delays associated with the acquisition, including costs to integrate beyond current estimates;
- the ability to deduct or claim tax attributes or benefits such as operating losses, business or foreign tax credits; and
- the disruption of, or the loss of momentum in, each company's ongoing businesses or inconsistencies in standards, controls, procedures and policies.

Any of these factors could adversely affect our ability to maintain relationships with customers, suppliers, employees and other constituencies or could reduce our earnings or otherwise adversely affect our business and financial results.

Our plans to divest certain businesses are subject to various risks and uncertainties and may not be completed in accordance with the expected plans or anticipated time frame, or at all, and will involve significant time and expense, which could disrupt or adversely affect our business.

Divesting businesses involve risks and uncertainties, such as the difficulty separating assets related to such businesses from the businesses we retain, employee distraction, the need to obtain regulatory approvals and other third-party consents, which potentially disrupts customer and vendor relationships, and the fact that we may be subject to additional tax obligations or loss of certain tax benefits. Such actions also involve significant costs and require time and attention of our management, which may divert attention from other business operations. Because of these challenges, as well as market conditions or other factors, the anticipated divestitures may take longer or be costlier or generate fewer benefits than expected and may not be completed at all. If we are unable to complete the divestitures or to successfully transition divested businesses, our business and financial results could be negatively impacted. After we dispose of a business, we may retain exposure on financial or performance guarantees and other contractual, employment, pension and severance obligations, and potential liabilities that may arise under law because of the disposition or the subsequent failure of an acquirer. As a result, performance by the divested businesses or other conditions outside of our control could have a material adverse effect on our results of operations. In addition, the divestiture of any business could negatively impact our profitability because of losses that may result from such a sale, the loss of sales and operating income, or a decrease in cash flows.

Our ability to grow and to compete in our industry will be harmed if we do not retain the continued services of our key technical and management personnel and identify, hire, and retain additional qualified personnel.

There is strong competition for qualified technical and management personnel in the sectors in which we compete. We may not be able to continue to attract and retain qualified technical and management personnel, such as engineers, architects and project managers, who are necessary for the development of our business or to replace qualified personnel in the timeframe demanded by our clients. In addition, we may occasionally enter into contracts before we have hired or retained appropriate staffing for that project. Also, some of our personnel hold government granted eligibility that may be required to obtain government projects. If we were to lose some or all of these personnel, they would be difficult to replace. In addition, we rely heavily upon the expertise and leadership of our senior management. If we are unable to retain executives and other key personnel, the roles and responsibilities of those employees will need to be filled, which may require that we devote time and resources to identify, hire and integrate new employees. Loss of the services of, or failure to recruit, key technical and management personnel could limit our ability to successfully complete existing projects and compete for new projects.

Our revenue and growth prospects may be harmed if we or our employees are unable to obtain government granted eligibility or other qualifications we and they need to perform services for our customers.

A number of government programs require contractors to have government granted eligibility, such as security clearance credentials. Depending on the project, eligibility can be difficult and time-consuming to obtain. If we or our employees are unable to obtain or retain the necessary eligibility, we may not be able to win new business, and our existing customers could terminate their contracts with us or decide not to renew them. To the extent we cannot obtain or maintain the required security clearances for our employees working on a particular contract, we may not derive the revenue or profit anticipated from such contract.

Our industry is highly competitive and we may be unable to compete effectively, which could result in reduced revenue, profitability and market share.

We are engaged in a highly competitive business. The markets we serve are highly fragmented and we compete with a large number of regional, national and international companies. These competitors may have greater financial and other resources than we do. Others are smaller and more specialized, and concentrate their resources in particular areas of

expertise. The extent of our competition varies according to the particular markets and geographic area. In addition, the technical and professional aspects of some of our services generally do not require large upfront capital expenditures and provide limited barriers against new competitors.

The degree and type of competition we face is also influenced by the type and scope of a particular project. Our clients make competitive determinations based upon qualifications, experience, performance, reputation, technology, customer relationships and ability to provide the relevant services in a timely, safe and cost-efficient manner. Increased competition may result in our inability to win bids for future projects and loss of revenue, profitability and market share.

If we extend a significant portion of our credit to clients in a specific geographic area or industry, we may experience disproportionately high levels of collection risk and nonpayment if those clients are adversely affected by factors particular to their geographic area or industry.

Our clients include public and private entities that have been, and may continue to be, negatively impacted by the changing landscape in the global economy. While outside of the U.S. federal government, no one client accounted for over 10% of our revenue for fiscal 2019, we face collection risk as a normal part of our business where we perform services and subsequently bill our clients for such services, or when we make equity investments in majority or minority controlled large-scale client projects and other long-term capital projects before the project completes operational status or completes its project financing. In the event that we have concentrated credit risk from clients in a specific geographic area or industry, continuing negative trends or a worsening in the financial condition of that specific geographic area or industry could make us susceptible to disproportionately high levels of default by those clients. Such defaults could materially adversely impact our revenues and our results of operations.

Our services expose us to significant risks of liability and our insurance policies may not provide adequate coverage.

Our services involve significant risks of professional and other liabilities that may substantially exceed the fees that we derive from our services. In addition, we sometimes contractually assume liability to clients on projects under indemnification or guarantee agreements. We cannot predict the magnitude of potential liabilities from the operation of our business. In addition, in the ordinary course of our business, we frequently make professional judgments and recommendations about environmental and engineering conditions of project sites for our clients. We may be deemed to be responsible for these professional judgments and recommendations if they are later determined to be inaccurate. Any unfavorable legal ruling against us could result in substantial monetary damages or even criminal violations.

Our professional liability policies cover only claims made during the term of the policy. Additionally, our insurance policies may not protect us against potential liability due to various exclusions in the policies and self-insured retention amounts. Partially or completely uninsured claims, if successful and of significant magnitude, could have a material adverse effect on our business.

Unavailability or cancellation of third-party insurance coverage would increase our overall risk exposure as well as disrupt the management of our business operations.

We maintain insurance coverage from third-party insurers as part of our overall risk management strategy and because some of our contracts require us to maintain specific insurance coverage limits. If any of our third-party insurers fail, suddenly cancel our coverage or otherwise are unable to provide us with adequate insurance coverage, then our overall risk exposure and our operational expenses would increase and the management of our business operations would be disrupted. In addition, there can be no assurance that any of our existing insurance coverage will be renewable upon the expiration of the coverage period or that future coverage will be affordable at the required limits.

If we do not have adequate indemnification for our services related to nuclear materials, it could adversely affect our business and financial condition.

We provide services to the Department of Energy and the nuclear energy industry in the ongoing maintenance and modification, as well as the decontamination and decommissioning, of nuclear energy plants. Indemnification provisions under the Price-Anderson Act available to nuclear energy plant operators and Department of Energy contractors

do not apply to all liabilities that we might incur while performing services as a radioactive materials cleanup contractor for the Department of Energy and the nuclear energy industry. If the Price-Anderson Act's indemnification protection does not apply to our services or if our exposure occurs outside the U.S., our business and financial condition could be adversely affected either by our client's refusal to retain us, by our inability to obtain commercially adequate insurance and indemnification, or by potentially significant monetary damages we may incur.

We also provide services to the United Kingdom's Nuclear Decommissioning Authority (NDA) relating to clean-up and decommissioning of the United Kingdom's public sector nuclear sites. Indemnification provisions under the Nuclear Installations Act 1965 available to nuclear site licensees, the Atomic Energy Authority, and the Crown, and contractual indemnification from the NDA do not apply to all liabilities that we might incur while performing services as a clean-up and decommissioning contractor for the NDA. If the Nuclear Installations Act 1965 and contractual indemnification protection does not apply to our services or if our exposure occurs outside the United Kingdom, our business and financial condition could be adversely affected either by our client's refusal to retain us, by our inability to obtain commercially adequate insurance and indemnification, or by potentially significant monetary damages we may incur.

Our backlog of uncompleted projects under contract is subject to unexpected adjustments and cancellations and, thus may not accurately reflect future revenue and profits.

At September 30, 2019, our contracted backlog was approximately $24.3 billion, our awarded backlog was approximately $33.1 billion and our unconsolidated joint venture backlog was approximately $2.3 billion for a total backlog of $59.7 billion. Our contracted backlog includes revenue we expect to record in the future from signed contracts and, in the case of a public sector client, where the project has been funded. We reported transaction price allocated to remaining unsatisfied performance obligations (RUPO) of $23.6 billion, as described in Note 4, Revenue Recognition, in the notes to our consolidated financial statements. The most significant difference between our contracted backlog and RUPO is revenue related to service contracts that extend beyond the termination provisions of those contracts. Our contracted backlog includes revenues for service contracts expected to be earned over the term of that contract. Guidance for the calculation of RUPO requires us to assume the contract will be terminated at its earliest convenience, resulting in RUPO to be $0.7 billion lower than contracted backlog. Our awarded backlog includes revenue we expect to record in the future where we have been awarded the work, but the contractual agreement has not yet been signed. We cannot guarantee that future revenue will be realized from either category of backlog or, if realized, will result in profits. Many projects may remain in our backlog for an extended period of time because of the size or long-term nature of the contract. In addition, from time to time, projects are delayed, scaled back or canceled. These types of backlog reductions adversely affect the revenue and profits that we ultimately receive from contracts reflected in our backlog.

We have submitted claims to clients for work we performed beyond the initial scope of some of our contracts. If these clients do not approve these claims, our results of operations could be adversely impacted.

We typically have pending claims submitted under some of our contracts for payment of work performed beyond the initial contractual requirements for which we have already recorded revenue. In general, we cannot guarantee that such claims will be approved in whole, in part, or at all. Often, these claims can be the subject of lengthy arbitration or litigation proceedings, and it is difficult to accurately predict when these claims will be fully resolved. When these types of events occur and unresolved claims are pending, we have used working capital in projects to cover cost overruns pending the resolution of the relevant claims. If these claims are not approved, our revenue may be reduced in future periods.

In conducting our business, we depend on other contractors, subcontractors and equipment and material providers. If these parties fail to satisfy their obligations to us or other parties or if we are unable to maintain these relationships, our revenue, profitability and growth prospects could be adversely affected.

We depend on contractors, subcontractors and equipment and material providers in conducting our business. There is a risk that we may have disputes with our subcontractors arising from, among other things, the quality and timeliness of work performed by the subcontractor, customer concerns about the subcontractor, or our failure to extend existing task orders or issue new task orders under a subcontract. Also, to the extent that we cannot acquire equipment and materials at reasonable costs, or if the amount we are required to pay exceeds our estimates, our ability to complete a

project in a timely fashion or at a profit may be impaired. In addition, if any of our subcontractors fail to deliver on a timely basis the agreed-upon supplies and/or perform the agreed-upon services, our ability to fulfill our obligations as a prime contractor may be jeopardized; we could be held responsible for such failures and/or we may be required to purchase the supplies or services from another source at a higher price. This may reduce the profit to be realized or result in a loss on a project for which the supplies or services are needed.

We also rely on relationships with other contractors when we act as their subcontractor or joint venture partner. Our future revenue and growth prospects could be adversely affected if other contractors eliminate or reduce their subcontracts or joint venture relationships with us, or if a government agency terminates or reduces these other contractors' programs, does not award them new contracts or refuses to pay under a contract. In addition, due to "pay when paid" provisions that are common in subcontracts in many countries, including the U.S., we could experience delays in receiving payment if the prime contractor experiences payment delays.

If clients use our reports or other work product without appropriate disclaimers or in a misleading or incomplete manner, or if our reports or other work product are not in compliance with professional standards and other regulations, our business could be adversely affected.

The reports and other work product we produce for clients sometimes include projections, forecasts and other forward-looking statements. Such information by its nature is subject to numerous risks and uncertainties, any of which could cause the information produced by us to ultimately prove inaccurate. While we include appropriate disclaimers in the reports that we prepare for our clients, once we produce such written work product, we do not always have the ability to control the manner in which our clients use such information. As a result, if our clients reproduce such information to solicit funds from investors for projects without appropriate disclaimers and the information proves to be incorrect, or if our clients reproduce such information for potential investors in a misleading or incomplete manner, our clients or such investors may threaten to or file suit against us for, among other things, securities law violations. For example, in August 2016, an affiliate entered into a settlement related to, among other things, alleged deficiencies in a traffic forecast. If we were found to be liable for any claims related to our client work product, our business could be adversely affected.

In addition, our reports and other work product may need to comply with professional standards, licensing requirements, securities regulations and other laws and rules governing the performance of professional services in the jurisdiction where the services are performed. We could be liable to third parties who use or rely upon our reports and other work product even if we are not contractually bound to those third parties. These events could in turn result in monetary damages and penalties.

Failure to adequately protect, maintain, or enforce our rights in our intellectual property may adversely limit our competitive position.

Our success depends, in part, upon our ability to protect our intellectual property. We rely on a combination of intellectual property policies and other contractual arrangements to protect much of our intellectual property where we do not believe that trademark, patent or copyright protection is appropriate or obtainable. Trade secrets are generally difficult to protect. Although our employees are subject to confidentiality obligations, this protection may be inadequate to deter or prevent misappropriation of our confidential information and/or the infringement of our patents and copyrights. Further, we may be unable to detect unauthorized use of our intellectual property or otherwise take appropriate steps to enforce our rights. Failure to adequately protect, maintain, or enforce our intellectual property rights may adversely limit our competitive position.

Negotiations with labor unions and possible work actions could divert management attention and disrupt operations. In addition, new collective bargaining agreements or amendments to agreements could increase our labor costs and operating expenses.

We regularly negotiate with labor unions and enter into collective bargaining agreements. The outcome of any future negotiations relating to union representation or collective bargaining agreements may not be favorable to us. We may reach agreements in collective bargaining that increase our operating expenses and lower our net income as a result of higher wages or benefit expenses. In addition, negotiations with unions could divert management attention and disrupt

operations, which may adversely affect our results of operations. If we are unable to negotiate acceptable collective bargaining agreements, we may have to address the threat of union-initiated work actions, including strikes. Depending on the nature of the threat or the type and duration of any work action, these actions could disrupt our operations and adversely affect our operating results.

Our charter documents contain provisions that may delay, defer or prevent a change of control.

Provisions of our certificate of incorporation and bylaws could make it more difficult for a third party to acquire control of us, even if the change in control would be beneficial to stockholders. These provisions include the following:

- ability of our Board of Directors to authorize the issuance of preferred stock in series without stockholder approval;
- vesting of exclusive authority in our Board of Directors to determine the size of the board (subject to limited exceptions) and to fill vacancies;
- advance notice requirements for stockholder proposals and nominations for election to our Board of Directors; and
- prohibitions on our stockholders from acting by written consent.

Changes in tax laws could increase our worldwide tax rate and materially affect our results of operations.

We are subject to tax laws in the U.S. and numerous foreign jurisdictions. Many international legislative and regulatory bodies have proposed and/or enacted legislation that could significantly impact how U.S. multinational corporations are taxed on foreign earnings. Due to the large scale of our U.S. and international business activities, many of these proposed and enacted changes to the taxation of our activities could increase our worldwide effective tax rate and harm results of operations.

ITEM 1B. UNRESOLVED STAFF COMMENTS

None.

ITEM 2. PROPERTIES

Our corporate offices are located in approximately 31,500 square feet of space at 1999 Avenue of the Stars, Los Angeles, California. Our other offices, including smaller administrative or project offices, consist of an aggregate of approximately 10.8 million square feet worldwide. Virtually all of our offices are leased. See Note 11 in the notes to our consolidated financial statements for information regarding our lease obligations. We may add additional facilities from time to time in the future as the need arises.

ITEM 3. LEGAL PROCEEDINGS

As a government contractor, we are subject to various laws and regulations that are more restrictive than those applicable to non-government contractors. Intense government scrutiny of contractors' compliance with those laws and regulations through audits and investigations is inherent in government contracting and, from time to time, we receive inquiries, subpoenas, and similar demands related to our ongoing business with government entities. Violations can result in civil or criminal liability as well as suspension or debarment from eligibility for awards of new government contracts or option renewals.

We are involved in various investigations, claims and lawsuits in the normal conduct of our business. We are not always aware if we or our affiliates are under investigation or the status of such matters. Although the outcome of our legal proceedings cannot be predicted with certainty and no assurances can be provided, in the opinion of our management,

based upon current information and discussions with counsel, with the exception of the matters noted in Note 18, Commitments and Contingencies, to the financial statements contained in this report to the extent stated therein, none of the investigations, claims and lawsuits in which we are involved is expected to have a material adverse effect on our consolidated financial position, results of operations, cash flows or our ability to conduct business. See Note 18, Commitments and Contingencies, to the financial statements contained in this report for a discussion of certain matters to which we are a party. The information set forth in such note is incorporated by reference into this Item 3. From time to time, we establish reserves for litigation when we consider it probable that a loss will occur.

ITEM 4. MINE SAFETY DISCLOSURES

The Company does not act as the owner of any mines, but we may act as a mining operator as defined under the Federal Mine Safety and Health Act of 1977 where we may be a lessee of a mine, a person who operates, controls or supervises such mine, or an independent contractor performing services or construction of such mine. Information concerning mine safety violations or other regulatory matters required by Section 1503(a) of the Dodd-Frank Wall Street Reform and Consumer Protection Act and Item 104 of Regulation S-K is included in Exhibit 95.

PART II

ITEM 5. MARKET FOR REGISTRANT'S COMMON EQUITY, RELATED STOCKHOLDER MATTERS AND ISSUER PURCHASES OF EQUITY SECURITIES

Our common stock is listed on the New York Stock Exchange (NYSE) under the symbol "ACM." According to the records of our transfer agent, there were 1,997 stockholders of record as of November 4, 2019.

Unregistered Sales of Equity Securities

None.

Equity Compensation Plans

The following table presents certain information about shares of AECOM common stock that may be issued under our equity compensation plans as of September 30, 2019:

	Column A	Column B	Column C
Plan Category	**Number of securities to be issued upon exercise of outstanding options, warrants, and rights[1]**	**Weighted-average exercise price of outstanding options, warrants, and rights**	**Number of securities remaining available for future issuance under equity compensation plans (excluding securities reflected in Column A)**
Equity compensation plans not approved by stockholders:	N/A	N/A	N/A
Equity compensation plans approved by stockholders:			
AECOM Stock Incentive Plans	5,711,366 [1]	$ 31.62 [2]	11,573,972
AECOM Employee Stock Purchase Plan[3]	N/A	N/A	10,765,123
Total	5,711,366	$ 31.62	22,339,095

(1) Includes 127,714 shares issuable upon the exercise of stock options, 3,318,009 shares issuable upon the vesting of Restricted Stock Units and 2,265,643 shares issuable if specified performance targets are met under Performance Earnings Program Awards (PEP).

(2) Weighted-average exercise price of outstanding options only.

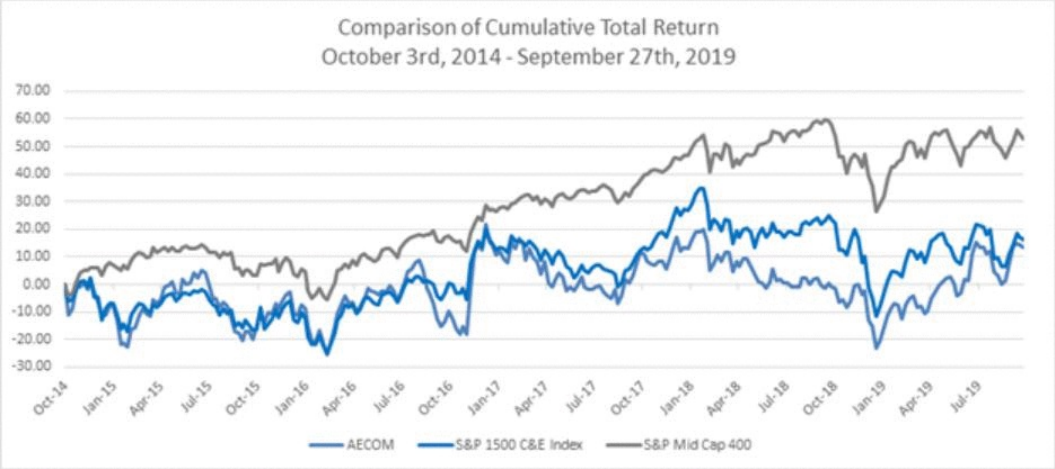
(3) Amounts only reflected in column (c) and include all shares available for future issuance and subject to outstanding rights.

Performance Measurement Comparison[1]

The following chart compares the cumulative total stockholder return of AECOM stock (ACM) with the cumulative total return of the S&P MidCap 400, and the S&P Composite 1500 Construction & Engineering, from October 3, 2014 to September 27, 2019. We removed the S&P 500 Aerospace and Defense index due to the proposed sale of our Management Services business.

We believe the S&P 400 MidCap is an appropriate independent broad market index, since it measures the performance of similar mid-sized companies in numerous sectors. In addition, we believe the S&P Composite 1500 Construction & Engineering index is an appropriate third party published industry index since it measures the performance of engineering and construction companies.

(1) This section is not "soliciting material," is not deemed "filed" with the SEC and is not incorporated by reference in any of our filings under the Securities Act or Exchange Act whether made before or after the date hereof and irrespective of any general incorporation language in any such filing.



Stock Repurchase Program

On September 21, 2017, the Company's Board of Directors announced a new capital allocation policy that authorized the repurchase of up to $1.0 billion in AECOM common stock. Stock repurchases can be made through open market purchases or other methods, including pursuant to a Rule 10b5-1 plan. A summary of the repurchase activity for the three months ended September 30, 2019 is as follows:

Period	Total Number of Shares Purchased	Average Price Paid Per Share	Total Number of Shares Purchased as Part of Publicly Announced Plans or Programs	Maximum Dollar Value that May Yet Be Purchased Under the Plans or Programs
July 1 – 31, 2019	—	$ —	—	$ 790,000,000
August 1 – 31, 2019	—	—	—	790,000,000
September 1 – 30, 2019	399,500	37.87	399,500	774,871,000
Total	399,500	$ 37.87	399,500	

ITEM 6. SELECTED FINANCIAL DATA

SELECTED CONSOLIDATED FINANCIAL DATA

You should read the following selected consolidated financial data along with "Management's Discussion and Analysis of Financial Condition and Results of Operations" and our consolidated financial statements and the accompanying notes, which are included in this Form 10-K. We derived the selected consolidated financial data from our audited consolidated financial statements.

	Year Ended September 30,				
	2019	2018	2017	2016	2015
	(in millions, except share data)				
Consolidated Statement of Operations Data:					
Revenue	$ 20,173	$ 20,156	$ 18,203	$ 17,411	$ 17,990
Cost of revenue	19,360	19,505	17,519	16,768	17,455
Gross profit	813	651	684	643	535
Equity in earnings of joint ventures	81	81	142	104	106
General and administrative expenses	(148)	(136)	(134)	(115)	(114)
Restructuring costs	(95)	—	—	—	—
(Loss) gain on disposal activities	(11)	(3)	1	(43)	—
Impairment of long-lived assets, including goodwill	(615)	(168)	—	—	—
Acquisition and integration expenses	—	—	(39)	(214)	(398)
Income from operations	25	425	654	375	129
Other income	17	20	7	8	19
Interest expense	(226)	(268)	(232)	(258)	(299)
(Loss) income before income tax (benefit) expense	(184)	177	429	125	(151)
Income tax (benefit) expense	—	(20)	8	(38)	(80)
Net (loss) income	(184)	197	421	163	(71)
Noncontrolling interests in income of consolidated subsidiaries, net of tax	(77)	(61)	(82)	(67)	(84)
Net (loss) income attributable to AECOM	$ (261)	$ 136	$ 339	$ 96	$ (155)
Net (loss) income attributable to AECOM per share:					
Basic	$ (1.66)	$ 0.86	$ 2.18	$ 0.62	$ (1.04)
Diluted	$ (1.66)	$ 0.84	$ 2.13	$ 0.62	$ (1.04)
Weighted average shares outstanding: (in millions)					
Basic	157	159	156	155	150
Diluted	157	162	159	156	150

	Year Ended September 30,				
	2019	2018	2017	2016	2015
	(in millions, except employee data)				
Other Data:					
Depreciation and amortization[1]	$ 261	$ 268	$ 279	$ 399	$ 599
Amortization expense of acquired intangible assets[2]	86	97	103	202	391
Capital expenditures, net of disposals	83	87	78	137	69
Contracted backlog	$ 24,296	$ 21,863	$ 24,234	$ 23,710	$ 24,468
Number of full-time and part-time employees	86,000	87,000	87,000	87,000	92,000

(1) Includes amortization of deferred debt issuance costs.

(2) Included in depreciation and amortization above.

	As of September 30,				
	2019	2018	2017	2016	2015
	(in millions)				
Consolidated Balance Sheet Data:					
Cash and cash equivalents	$ 1,080	$ 887	$ 802	$ 692	$ 684
Working capital	1,073	998	1,104	696	1,410
Total assets	14,462	14,681	14,397	13,670	14,014
Long-term debt excluding current portion	3,286	3,484	3,702	3,702	4,447
AECOM Stockholders' equity	3,691	4,093	3,996	3,367	3,408

ITEM 7. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

This Annual Report on Form 10-K contains forward-looking statements within the meaning of the safe harbor provisions of the Private Securities Litigation Reform Act of 1995 that are not limited to historical facts, but reflect the Company's current beliefs, expectations or intentions regarding future events. These statements include forward-looking statements with respect to the Company, including the Company's business, operations and strategy, and the engineering and construction industry. Statements that are not historical facts, without limitation, including statements that use terms such as "anticipates," "believes," "expects," "estimates," "intends," "may," "plans," "potential," "projects," and "will" and that relate to our future revenues, expenditures and business trends; future reduction of our self-perform at-risk construction exposure; future accounting estimates; future contractual performance obligations; future conversions of backlog; future capital allocation priorities including common stock repurchases, future trade receivables, future debt pay downs; future post-retirement expenses; future tax benefits and expenses; future compliance with regulations; future legal claims and insurance coverage; future effectiveness of our disclosure and internal controls over financial reporting; future costs savings; the sale of Management Services from AECOM and our business expectations after the sale is completed; and other future economic and industry conditions, are forward-looking statements. In light of the risks and uncertainties inherent in all forward-looking statements, the inclusion of such statements in this Annual Report should not be considered as a representation by us or any other person that our objectives or plans will be achieved. Although management believes that the assumptions underlying the forward-looking statements are reasonable, these assumptions and the forward-looking statements are subject to various factors, risks and uncertainties, many of which are beyond our control, including, but not limited to, our business is cyclical and vulnerable to economic downturns and client spending reductions; government shutdowns; long-term government contracts and subject to uncertainties related to government contract appropriations; governmental agencies may modify, curtail or terminate our contracts; government contracts are subject to audits and adjustments of contractual terms; losses under fixed-price contracts; limited control over operations run through our joint venture entities; liability for misconduct by our employees or consultants; failure to comply with laws or regulations applicable to our business; maintaining adequate surety and financial capacity; high leverage and potential inability to service our debt and guarantees; exposure to Brexit and tariffs; exposure to political and economic risks in different countries; currency exchange rate fluctuations; retaining and recruiting key technical and management personnel; legal claims; inadequate insurance coverage; environmental law compliance and inadequate nuclear indemnification; unexpected adjustments and cancellations related to our backlog; partners and third parties who may fail to satisfy their legal obligations; managing pension costs; AECOM Capital's real estate development; cybersecurity issues, IT outages and data privacy; uncertainties as to the timing and completion of the proposed sale of the Company's Management Services business ("the proposed sale") or whether it will be completed; risks associated with the impact or terms of the proposed sale; risks associated with the benefits and costs of the proposed sale, including the risk that the expected benefits of the proposed sale or any contingent purchase price will not be realized within the expected time frame, in full or at all, and the risk that conditions to the proposed sale will not be satisfied and/or that the proposed sale will not be completed within the expected time frame, on the expected terms or at all; the risk that any consents or regulatory or other approvals required in connection with the proposed sale will not be received or obtained within the expected time frame, on the expected terms or at all; the risk that the financing intended to fund the proposed sale may not be obtained; the risk that costs of restructuring transactions and other costs incurred in connection with the proposed sale will exceed our estimates or otherwise adversely affect our business or operations; the impact of the proposed sale on our businesses and the risk that consummating the proposed sale may be more difficult, time-consuming or costly than expected; as well as other additional risks and factors discussed in this Annual Report on Form 10-K and any subsequent reports we file with the SEC. Accordingly, actual results could differ materially from those contemplated by any forward-looking statement.

All subsequent written and oral forward-looking statements concerning the Company or other matters attributable to the Company or any person acting on its behalf are expressly qualified in their entirety by the cautionary statements above. You are cautioned not to place undue reliance on these forward-looking statements, which speak only to the date they are made. The Company is under no obligation (and expressly disclaims any such obligation) to update or revise any forward-looking statement that may be made from time to time, whether as a result of new information, future developments or otherwise. Please review "Part I, Item 1A—Risk Factors" in this Annual Report for a discussion of the factors, risks and uncertainties that could affect our future results.

Our fiscal year consists of 52 or 53 weeks, ending on the Friday closest to September 30. For clarity of presentation, we present all periods as if the year ended on September 30. We refer to the fiscal year ended September 30, 2018 as "fiscal 2018" and the fiscal year ended September 30, 2019 as "fiscal 2019."

Overview

We are a leading fully integrated firm positioned to design, build, finance and operate infrastructure assets for governments, businesses and organizations throughout the world. We provide planning, consulting, architectural and engineering design services to commercial and government clients worldwide in major end markets such as transportation, facilities, environmental, energy, water and government markets. We also provide construction services, including building construction and energy, infrastructure and industrial construction, primarily in the Americas. In addition, we provide program and facilities management and maintenance, training, logistics, consulting, technical assistance, and systems integration and information technology services, primarily for agencies of the U.S. government and also for national governments around the world.

Our business focuses primarily on providing fee-based planning, consulting, architectural and engineering design services and, therefore, our business is labor intensive. We primarily derive income from our ability to generate revenue and collect cash from our clients through the billing of our employees' time spent on client projects and our ability to manage our costs. AECOM Capital primarily derives its income from real estate development sales and management fees.

We report our business through four segments: Design and Consulting Services (DCS), Construction Services (CS), Management Services (MS), and AECOM Capital (ACAP). Such segments are organized by the types of services provided, the differing specialized needs of the respective clients, and how we manage the business. We have aggregated various operating segments into our reportable segments based on their similar characteristics, including similar long-term financial performance, the nature of services provided, internal processes for delivering those services, and types of customers.

Our DCS segment delivers planning, consulting, architectural and engineering design services to commercial and government clients worldwide in major end markets such as transportation, facilities, environmental, energy, water and government. DCS revenue is primarily derived from fees from services that we provide, as opposed to pass-through costs from subcontractors.

Our CS segment provides construction services, including building construction and energy, infrastructure and industrial construction, primarily in the Americas. CS revenue typically includes a significant amount of pass-through costs from subcontractors.

Our MS segment provides program and facilities management and maintenance, training, logistics, consulting, technical assistance, and systems integration and information technology services, primarily for agencies of the U.S. government and also for national governments around the world. MS revenue typically includes a significant amount of pass-through costs from subcontractors.

Our ACAP segment primarily invests in real estate projects. ACAP typically partners with investors and experienced developers as co-general partners. In addition, ACAP may, but is not required to, enter into contracts with our other AECOM affiliates to provide design, engineering, construction management, development and operations and maintenance services for ACAP funded projects.

Our revenue is dependent on our ability to attract and retain qualified and productive employees, identify business opportunities, integrate and maximize the value of our recent acquisitions, allocate our labor resources to profitable and high growth markets, secure new contracts and renew existing client agreements. Demand for our services is cyclical and may be vulnerable to sudden economic downturns and reductions in government and private industry spending, which may result in clients delaying, curtailing or canceling proposed and existing projects. Moreover, as a professional services company, maintaining the high quality of the work generated by our employees is integral to our revenue generation and profitability.

Our costs consist primarily of the compensation we pay to our employees, including salaries, fringe benefits, the costs of hiring subcontractors, other project-related expenses and sales, general and administrative costs.

In December 2015, the federal legislation referred to as the Fixing America's Surface Transportation Act (FAST Act) was authorized. The FAST Act is a five-year federal program expected to provide infrastructure spending on roads, bridges, and public transit and rail systems. We expect that the passage of the FAST Act will continue to positively impact our transportation services business.

The U.S. federal government has proposed significant legislative and executive infrastructure initiatives that, if enacted, could have a positive impact to our infrastructure business.

As part of our capital allocation commitments, we repurchased common stock under our $1 billion authorization in the first, second and fourth quarters of fiscal 2019 and we intend to deploy future free cash flow towards debt reduction and stock repurchases.

United States and foreign trade policy actions and tariffs such as the March 2018 imposition of tariffs on steel and aluminum imports could impact client spending and affect the profitability of our fixed-price construction projects and other services.

Recent political unrest in Hong Kong where we have a significant presence could negatively impact our business.

We expect to exit the fixed-price combined cycle gas power plant construction and non-core Oil & Gas markets. We are continuing our review of our remaining at-risk construction projects with an expectation of reducing our self-perform at-risk construction exposure. We are evaluating our geographic exposure as part of a proposed plan to exit more than 30 countries, subject to applicable laws, to improve profitability and reduce our risk profile.

We expect to incur restructuring costs of $130 million to $160 million in fiscal year 2020 primarily related to costs associated with the sale of the Management Services business and expected exit of at-risk, self-perform construction. Total cash costs for the restructuring are expected to be between $160 and $180 million, including capital expenditures associated with real estate restructuring of approximately $40 million.

We cannot determine if future climate change and greenhouse gas laws and policies, such as the United Nations' COP-21 Paris Agreement, will have a material impact on our business or our clients' business; however, we expect future environmental laws and policies could negatively impact demand for our services related to fossil fuel projects and positively impact demand for our services related to environmental, infrastructure, nuclear and alternative energy projects.

On October 12, 2019, AECOM entered into a purchase and sale agreement with an affiliate of American Securities LLC and Lindsay Goldberg LLC to sell our Management Services business segment for a purchase price of $2.405 billion, subject to customary cash, debt and working capital adjustments. The transaction is expected to close in the second quarter of fiscal 2020.

Acquisitions

The aggregate value of all consideration for our acquisitions consummated during the years ended September 30, 2018 and 2017 was $5.6 million and $164.4 million, respectively. There were no acquisitions consummated during the year ended September 30, 2019.

All of our acquisitions have been accounted for as business combinations and the results of operations of the acquired companies have been included in our consolidated results since the dates of the acquisitions.

Components of Income and Expense

	Year Ended September 30,				
	2019	2018	2017	2016	2015
	(in millions)				
Other Financial Data:					
Revenue	$ 20,173	$ 20,156	$ 18,203	$ 17,411	$ 17,990
Cost of revenue	19,360	19,505	17,519	16,768	17,455
Gross profit	813	651	684	643	535
Equity in earnings of joint ventures	81	81	142	104	106
General and administrative expenses	(148)	(136)	(134)	(115)	(114)
Restructuring cost	(95)	—	—	—	—
(Loss) gain on disposal activities	(11)	(3)	1	(43)	—
Impairment of long-lived assets, including goodwill	(615)	(168)	—	—	—
Acquisition and integration expenses	—	—	(39)	(214)	(398)
Income from operations	$ 25	$ 425	$ 654	$ 375	$ 129

Revenue

We generate revenue primarily by providing planning, consulting, architectural and engineering design services to commercial and government clients around the world. Our revenue consists of both services provided by our employees and pass-through fees from subcontractors and other direct costs. We generally recognize revenue over time as performance obligations are satisfied and control over promised goods or services are transferred to our customers. We generally measure progress to completion using an input measure of total costs incurred divided by total costs expected to be incurred.

Cost of Revenue

Cost of revenue reflects the cost of our own personnel (including fringe benefits and overhead expense) associated with revenue.

Amortization Expense of Acquired Intangible Assets

Included in our cost of revenue is amortization of acquired intangible assets. We have ascribed value to identifiable intangible assets other than goodwill in our purchase price allocations for companies we have acquired. These assets include, but are not limited to, backlog and customer relationships. To the extent we ascribe value to identifiable intangible assets that have finite lives, we amortize those values over the estimated useful lives of the assets. Such amortization expense, although non-cash in the period expensed, directly impacts our results of operations. It is difficult to predict with any precision the amount of expense we may record relating to acquired intangible assets.

Equity in Earnings of Joint Ventures

Equity in earnings of joint ventures includes our portion of fees charged by our unconsolidated joint ventures to clients for services performed by us and other joint venture partners along with earnings we receive from our return on investments in unconsolidated joint ventures.

General and Administrative Expenses

General and administrative expenses include corporate expenses, including personnel, occupancy, and administrative expenses.

Acquisition and Integration Expenses

Acquisition and integration expenses are comprised of transaction costs, professional fees, and personnel costs, including due diligence and integration activities, primarily related to business acquisitions.

Goodwill Impairment

See Critical Accounting Policies and Consolidated Results below.

Income Tax Expense (Benefit)

As a global enterprise, income tax expense/(benefit) and our effective tax rates can be affected by many factors, including changes in our worldwide mix of pre-tax losses/earnings, the effect of non-controlling interest in income of consolidated subsidiaries, the extent to which the earnings are indefinitely reinvested outside of the United States, our acquisition strategy, tax incentives and credits available to us, changes in judgment regarding the realizability of our deferred tax assets, changes in existing tax laws and our assessment of uncertain tax positions. Our tax returns are routinely audited by the taxing authorities and settlements of issues raised in these audits can also sometimes affect our effective tax rate.

Geographic Information

For geographic financial information, please refer to Note 4 and Note 19 in the notes to our consolidated financial statements found elsewhere in the Form 10-K.

Critical Accounting Policies

Our financial statements are presented in accordance with accounting principles generally accepted in the United States (GAAP). Highlighted below are the accounting policies that management considers significant to understanding the operations of our business.

Revenue Recognition

Our accounting policies establish principles for recognizing revenue upon the transfer of control of promised goods or services to customers. We generally recognize revenues over time as performance obligations are satisfied. We generally measure our progress to completion using an input measure of total costs incurred divided by total costs expected to be incurred. In the course of providing these services, we routinely subcontract for services and incur other direct cost on behalf of our clients. These costs are passed through to clients, and in accordance with accounting rules, are included in our revenue and cost of revenue.

Revenue recognition and profit is dependent upon a number of factors, including the accuracy of a variety of estimates made at the balance sheet date, such as engineering progress, material quantities, the achievement of milestones, penalty provisions, labor productivity and cost estimates. Additionally, we are required to make estimates for the amount of consideration to be received, including bonuses, awards, incentive fees, claims, unpriced change orders, penalties and liquidated damages. Variable consideration is included in the estimate of transaction price only to the extent that a significant reversal would not be probable. We continuously monitor factors that may affect the quality of our estimates, and material changes in estimates are disclosed accordingly.

Claims Recognition

Claims are amounts in excess of the agreed contract price (or amounts not included in the original contract price) that we seek to collect from customers or others for delays, errors in specifications and designs, contract terminations, change orders in dispute or unapproved contracts as to both scope and price or other causes of unanticipated additional costs. We record contract revenue related to claims only if it is probable that the claim will result in additional contract revenue and only to the extent that a significant reversal would not be probable. The amounts recorded, if material, are

disclosed in the notes to the financial statements. Costs attributable to claims are treated as costs of contract performance as incurred.

Government Contract Matters

Our federal government and certain state and local agency contracts are subject to, among other regulations, regulations issued under the Federal Acquisition Regulations (FAR). These regulations can limit the recovery of certain specified indirect costs on contracts and subject us to ongoing multiple audits by government agencies such as the Defense Contract Audit Agency (DCAA). In addition, most of our federal and state and local contracts are subject to termination at the discretion of the client.

Audits by the DCAA and other agencies consist of reviews of our overhead rates, operating systems and cost proposals to ensure that we account for such costs in accordance with the Cost Accounting Standards of the FAR (CAS). If the DCAA determines we have not accounted for such costs consistent with CAS, the DCAA may disallow these costs. There can be no assurance that audits by the DCAA or other governmental agencies will not result in material cost disallowances in the future.

Allowance for Doubtful Accounts

We record accounts receivable net of an allowance for doubtful accounts. This allowance for doubtful accounts is estimated based on management's evaluation of the contracts involved and the financial condition of our clients. The factors we consider in our contract evaluations include, but are not limited to:

- Client type—federal or state and local government or commercial client;
- Historical contract performance;
- Historical collection and delinquency trends;
- Client credit worthiness; and
- General economic conditions.

Contract Assets and Contract Liabilities

Contract assets represent the contract revenue recognized but not yet billed pursuant to contract terms or accounts billed after the period end.

Contract liabilities represent the billings to date, as allowed under the terms of a contract, but not yet recognized as contract revenue using our revenue recognition policy.

Investments in Unconsolidated Joint Ventures

We have noncontrolling interests in joint ventures accounted for under the equity method. Fees received for and the associated costs of services performed by us and billed to joint ventures with respect to work done by us for third-party customers are recorded as our revenues and costs in the period in which such services are rendered. In certain joint ventures, a fee is added to the respective billings from both ourselves and the other joint venture partners on the amounts billed to the third-party customers. These fees result in earnings to the joint venture and are split with each of the joint venture partners and paid to the joint venture partners upon collection from the third-party customer. We record our allocated share of these fees as equity in earnings of joint ventures.

Additionally, our ACAP segment primarily invests in real estate projects.

Income Taxes

We provide for income taxes in accordance with principles contained in ASC Topic 740, Income Taxes. Under these principles, we recognize the amount of income tax payable or refundable for the current year and deferred tax assets and liabilities for the future tax consequences of events that have been recognized in our financial statements or tax returns.

Deferred tax assets and liabilities are measured using enacted tax rates in effect for the year in which those temporary differences are expected to be recovered or settled. The effect on deferred tax assets and liabilities of a change in tax rates is recognized in earnings in the period when the new rate is enacted. Deferred tax assets are evaluated for future realization and reduced by a valuation allowance if it is more likely than not that a portion will not be realized.

We measure and recognize the amount of tax benefit that should be recorded for financial statement purposes for uncertain tax positions taken or expected to be taken in a tax return. With respect to uncertain tax positions, we evaluate the recognized tax benefits for recognition, measurement, derecognition, classification, interest and penalties, interim period accounting and disclosure requirements. Judgment is required in assessing the future tax consequences of events that have been recognized in our financial statements or tax returns.

Valuation Allowance. Deferred income taxes are provided on the liability method whereby deferred tax assets and liabilities are established for the difference between the financial reporting and income tax basis of assets and liabilities, as well as for tax attributes such as operating loss and tax credit carryforwards. Deferred tax assets and liabilities are adjusted for the effects of changes in tax laws and tax rates on the date of enactment of such changes to laws and tax rates.

Deferred tax assets are reduced by a valuation allowance when, in our opinion, it is more likely than not that some portion or all of the deferred tax assets may not be realized. The evaluation of the recoverability of the deferred tax asset requires the Company to weigh all positive and negative evidence to reach a conclusion that it is more likely than not that all or some portion of the deferred tax assets will not be realized. The weight given to the evidence is commensurate with the extent to which it can be objectively verified. Whether a deferred tax asset may be realized requires considerable judgment by us. In considering the need for a valuation allowance, we consider a number of factors including the nature, frequency, and severity of cumulative financial reporting losses in recent years, the future reversal of existing temporary differences, predictability of future taxable income exclusive of reversing temporary differences of the character necessary to realize the asset, relevant carryforward periods, taxable income in carry-back years if carry-back is permitted under tax law, and prudent and feasible tax planning strategies that would be implemented, if necessary, to protect against the loss of the deferred tax asset that would otherwise expire. Whether a deferred tax asset will ultimately be realized is also dependent on varying factors, including, but not limited to, changes in tax laws and audits by tax jurisdictions in which we operate.

If future changes in judgment regarding the realizability of our deferred tax assets lead us to determine that it is more likely than not that we will not realize all or part of our deferred tax asset in the future, we will record an additional valuation allowance. Conversely, if a valuation allowance exists and we determine that the ultimate realizability of all or part of the net deferred tax asset is more likely than not to be realized, then the amount of the valuation allowance will be reduced. This adjustment will increase or decrease income tax expense in the period of such determination.

Undistributed Non-U.S. Earnings. The results of our operations outside of the United States are consolidated for financial reporting; however, earnings from investments in non-U.S. operations are included in domestic U.S. taxable income only when actually or constructively received. No deferred taxes have been provided on the undistributed gross book-tax basis differences of our non-U.S. operations of approximately $1.8 billion because we have the ability to and intend to permanently reinvest these basis differences overseas. If we were to repatriate these basis differences, additional taxes could be due at that time.

We continually explore initiatives to better align our tax and legal entity structure with the footprint of our non-U.S. operations and we recognize the tax impact of these initiatives, including changes in assessment of its uncertain tax positions, indefinite reinvestment exception assertions and realizability of deferred tax assets, earliest in the period when management believes all necessary internal and external approvals associated with such initiatives have been obtained, or when the initiatives are materially complete.

Goodwill and Acquired Intangible Assets

Goodwill represents the excess of amounts paid over the fair value of net assets acquired from an acquisition. In order to determine the amount of goodwill resulting from an acquisition, we perform an assessment to determine the value of the acquired company's tangible and identifiable intangible assets and liabilities. In our assessment, we determine whether identifiable intangible assets exist, which typically include backlog and customer relationships.

We test goodwill for impairment annually for each reporting unit in the fourth quarter of the fiscal year and between annual tests, if events occur or circumstances change which suggest that goodwill should be evaluated. Such events or circumstances include significant changes in legal factors and business climate, recent losses at a reporting unit, and industry trends, among other factors. A reporting unit is defined as an operating segment or one level below an operating segment. Our impairment tests are performed at the operating segment level as they represent our reporting units.

During the impairment test, we estimate the fair value of the reporting unit using income and market approaches, and compare that amount to the carrying value of that reporting unit. In the event the fair value of the reporting unit is determined to be less than the carrying value, goodwill is impaired, and an impairment loss is recognized equal to the excess, limited to the total amount of goodwill allocated to the reporting unit.

During the fourth quarter, we conduct our annual goodwill impairment test. The impairment evaluation process includes, among other things, making assumptions about variables such as revenue growth rates, profitability, discount rates, and industry market multiples, which are subject to a high degree of judgment.

Material assumptions used in the impairment analysis included the weighted average cost of capital (WACC) percent and terminal growth rates. For example, as of September 30, 2019, a 1% increase in the WACC rate represents a $900 million decrease to the fair value of our reporting units. As of September 30, 2019, a 1% decrease in the terminal growth rate represents a $500 million decrease to the fair value of our reporting units.

Pension Benefit Obligations

A number of assumptions are necessary to determine our pension liabilities and net periodic costs. These liabilities and net periodic costs are sensitive to changes in those assumptions. The assumptions include discount rates, long-term rates of return on plan assets and inflation levels limited to the United Kingdom and are generally determined based on the current economic environment in each host country at the end of each respective annual reporting period. We evaluate the funded status of each of our retirement plans using these current assumptions and determine the appropriate funding level considering applicable regulatory requirements, tax deductibility, reporting considerations and other factors. Based upon current assumptions, we expect to contribute $26.6 million to our international plans in fiscal 2020. Our required minimum contributions for our U.S. qualified plans are not significant. In addition, we may make additional discretionary contributions. We currently expect to contribute $14.7 million to our U.S. plans (including benefit payments to nonqualified plans and postretirement medical plans) in fiscal 2020. If the discount rate was reduced by 25 basis points, plan liabilities would increase by approximately $83.0 million. If the discount rate and return on plan assets were reduced by 25 basis points, plan expense would decrease by approximately $0.4 million and increase by approximately $3.5 million, respectively. If inflation increased by 25 basis points, plan liabilities in the United Kingdom would increase by approximately $40.8 million and plan expense would increase by approximately $2.2 million.

At each measurement date, all assumptions are reviewed and adjusted as appropriate. With respect to establishing the return on assets assumption, we consider the long term capital market expectations for each asset class held as an investment by the various pension plans. In addition to expected returns for each asset class, we take into account standard deviation of returns and correlation between asset classes. This is necessary in order to generate a distribution of possible returns which reflects diversification of assets. Based on this information, a distribution of possible returns is generated based on the plan's target asset allocation.

Capital market expectations for determining the long term rate of return on assets are based on forward-looking assumptions which reflect a 20-year view of the capital markets. In establishing those capital market assumptions and expectations, we rely on the assistance of our actuaries and our investment consultants. We and the plan trustees review

whether changes to the various plans' target asset allocations are appropriate. A change in the plans' target asset allocations would likely result in a change in the expected return on asset assumptions. In assessing a plan's asset allocation strategy, we and the plan trustees consider factors such as the structure of the plan's liabilities, the plan's funded status, and the impact of the asset allocation to the volatility of the plan's funded status, so that the overall risk level resulting from our defined benefit plans is appropriate within our risk management strategy.

Between September 30, 2018 and September 30, 2019, the aggregate worldwide pension deficit increased from $400.5 million to $483.9 million due to decreased discount rates. If the various plans do not experience future investment gains to reduce this shortfall, the deficit will be reduced by additional contributions.

Accrued Professional Liability Costs

We carry professional liability insurance policies or self-insure for our initial layer of professional liability claims under our professional liability insurance policies and for a deductible for each claim even after exceeding the self-insured retention. We accrue for our portion of the estimated ultimate liability for the estimated potential incurred losses. We establish our estimate of loss for each potential claim in consultation with legal counsel handling the specific matters and based on historic trends taking into account recent events. We also use an outside actuarial firm to assist us in estimating our future claims exposure. It is possible that our estimate of loss may be revised based on the actual or revised estimate of liability of the claims.

Foreign Currency Translation

Our functional currency is the U.S. dollar. Results of operations for foreign entities are translated to U.S. dollars using the average exchange rates during the period. Assets and liabilities for foreign entities are translated using the exchange rates in effect as of the date of the balance sheet. Resulting translation adjustments are recorded as a foreign currency translation adjustment into other accumulated comprehensive income/(loss) in stockholders' equity.

We limit exposure to foreign currency fluctuations in most of our contracts through provisions that require client payments in currencies corresponding to the currency in which costs are incurred. As a result of this natural hedge, we generally do not need to hedge foreign currency cash flows for contract work performed. However, we will use foreign exchange derivative financial instruments from time to time to mitigate foreign currency risk. The functional currency of all significant foreign operations is the respective local currency.

Fiscal year ended September 30, 2019 compared to the fiscal year ended September 30, 2018

Consolidated Results

	Fiscal Year Ended		Change	
	September 30, 2019	September 30, 2018	$	%
	($ in millions)			
Revenue	$ 20,173.3	$ 20,155.5	$ 17.8	0.1 %
Cost of revenue	19,359.9	19,504.9	(145.0)	(0.7)
Gross profit	813.4	650.6	162.8	25.0
Equity in earnings of joint ventures	81.0	81.1	(0.1)	(0.1)
General and administrative expenses	(148.1)	(135.7)	(12.4)	9.1
Restructuring cost	(95.4)	—	(95.4)	NM *
Loss on disposal activities	(10.4)	(2.9)	(7.5)	258.6
Impairment of long-lived assets, including goodwill	(615.4)	(168.2)	(447.2)	265.9
Income from operations	25.1	424.9	(399.8)	(94.1)
Other income	16.8	20.1	(3.3)	(16.4)
Interest expense	(226.0)	(267.5)	41.5	(15.5)
(Loss) income before income tax benefit	(184.1)	177.5	(361.6)	(203.7)
Income tax benefit	(0.1)	(19.7)	19.6	(99.5)
Net (loss) income	(184.0)	197.2	(381.2)	(193.3)
Noncontrolling interests in income of consolidated subsidiaries, net of tax	(77.1)	(60.7)	(16.4)	27.0
Net (loss) income attributable to AECOM	$ (261.1)	$ 136.5	$ (397.6)	(291.3)%

**NM - Not meaningful*

The following table presents the percentage relationship of statement of operations items to revenue:

	Fiscal Year Ended	
	September 30, 2019	September 30, 2018
Revenue	100.0 %	100.0 %
Cost of revenue	96.0	96.8
Gross profit	4.0	3.2
Equity in earnings of joint ventures	0.4	0.4
General and administrative expenses	(0.6)	(0.7)
Restructuring costs	(0.5)	0.0
Loss on disposal activities	(0.1)	0.0
Impairment of long-lived assets, including goodwill	(3.1)	(0.8)
Income from operations	0.1	2.1
Other income	0.1	0.1
Interest expense	(1.1)	(1.3)
(Loss) Income before income tax benefit	(0.9)	0.9
Income tax benefit	0.0	(0.1)
Net (loss) income	(0.9)	1.0
Noncontrolling interests in income of consolidated subsidiaries, net of tax	(0.4)	(0.3)
Net (loss) income attributable to AECOM	(1.3)%	0.7 %

Revenue

Our revenue for the year ended September 30, 2019 increased $17.8 million, or 0.1%, to $20,173.3 million as compared to $20,155.5 million for the corresponding period last year.

The increase in revenue for the year ended September 30, 2019 was primarily attributable to an increase in our MS segment of $424.6 million, an increase in our DCS segment of $45.1 million, and an increase in our ACAP segment of $8.2 million, offset by a decrease in our CS segment of $460.1 million, as discussed further below.

In the course of providing our services, we routinely subcontract for services and incur other direct costs on behalf of our clients. These costs are passed through to clients and, in accordance with industry practice and GAAP, are included in our revenue and cost of revenue. Because subcontractor and other direct costs can change significantly from project to project and period to period, changes in revenue may not be indicative of business trends. Subcontractor and other direct costs for the years ended September 30, 2019 and 2018 were $10.3 billion and $10.7 billion, respectively. Subcontractor costs and other direct costs as a percentage of revenue decreased to 51% during the year ended September 30, 2019 compared with 53% during the year ended September 30, 2018.

Gross Profit

Our gross profit for the year ended September 30, 2019 increased $162.8 million, or 25.0%, to $813.4 million as compared to $650.6 million for the corresponding period last year. For the year ended September 30, 2019, gross profit, as a percentage of revenue, increased to 4.0% from 3.2% in the year ended September 30, 2018.

Gross profit changes were due to the reasons noted in DCS, CS and MS reportable segments below.

Equity in Earnings of Joint Ventures

Our equity in earnings of joint ventures for the year ended September 30, 2019 was $81.0 million as compared to $81.1 million in the corresponding period last year.

General and Administrative Expenses

Our general and administrative expenses for the year ended September 30, 2019 increased $12.4 million, or 9.1%, to $148.1 million as compared to $135.7 million for the corresponding period last year. For the year ended September 30, 2019, general and administrative expenses decreased to 0.6% from 0.7% for the year ended September 30, 2018.

The increase in general and administrative expenses was due to increased personnel expenses.

Restructuring Costs

In the first quarter of fiscal 2019, we commenced a restructuring plan to improve profitability. During the year ended September 30, 2019, we incurred restructuring expenses of $95.4 million. We expect to achieve approximately $225 million of annual cost savings, which is expected to contribute to $150 million of cost savings in fiscal 2020.

Loss on Disposal Activities

Loss on disposal activities in the accompanying statements of operations for the year ended September 30, 2019 was $10.4 million compared to $2.9 million for the corresponding period last year. The loss on disposal activities in the current period primarily relates to incremental losses on the sale of specific non-core oil and gas assets in North America from our CS segment previously classified as assets held for sale.

Impairment of Long-Lived Assets, Including Goodwill

Impairment of long-lived assets, including goodwill, was $615.4 million and $168.2 million for the year ended September 30, 2019 and 2018, respectively. In 2019, the loss was due to a decrease in the estimated recovery and fair value of our reporting units with self-perform at-risk construction exposure in the CS segment. Included in the impairment of long-lived assets was a goodwill impairment charge of $588.0 million. Goodwill associated with the impairment was originally recognized in the acquisitions of URS Corporation in 2014 and Shimmick Construction Company, Inc. in 2017. Our continuing review of at-risk construction projects, including the decision to exit fixed-price combined cycle gas power plant construction, resulted in a lower estimated fair value than previously measured. In 2018, the loss was due to the disposition of certain non-core oil and gas businesses in North America from our CS segment. The disposition resulted in a remeasurement of the assets held for sale, which were recorded at their estimated fair values less costs to sell. Included in the impairment of long-lived assets was a goodwill impairment charge of $125.4 million.

Other Income

Our other income for the year ended September 30, 2019 decreased $3.3 million to $16.8 million as compared to $20.1 million for the corresponding period last year.

Other income is primarily comprised of interest income. The decrease in other income for the year ended September 30, 2019 was primarily due to a $9.1 million gain realized in the year ended September 30, 2018 from a foreign exchange forward contract entered into as part of the refinance of our Credit Agreement in March 2018, as discussed below in “Liquidity and Capital Resources – Debt – 2014 Credit Agreement.”

Interest Expense

Our interest expense for the year ended September 30, 2019 was $226.0 million as compared to $267.5 million for the corresponding period last year.

The decrease in interest expense for the year ended September 30, 2019 was primarily due to a $34.5 million prepayment premium paid on our $800 million unsecured 5.750% Senior Notes due 2022 that was incurred during the year ended September 30, 2018 and did not repeat in 2019.

Income Tax Benefit

Our income tax benefit for the year ended September 30, 2019 was $0.1 million compared to income tax benefit of $19.7 million for the year ended September 30, 2018. The decrease in tax benefit for the year ended September 30, 2019, compared to the corresponding period last year, is due primarily to tax expense of $82.7 million related to the goodwill impairment charge during fiscal 2019, a tax benefit of $20.3 million related to changes in valuation allowances including the release of a valuation allowance in the amount of $38.1 million due to sufficient positive evidence obtained during fiscal 2019, and the tax impacts of a decrease in overall pre-tax income of $361.6 million. The tax impact of these items were partially offset by one-time items that occurred during the fiscal year ended September 30, 2018, including valuation allowance increases of $58.7 million, a $47.8 million net tax benefit related to one-time U.S. federal tax law changes, tax expense of $33.9 million related to a goodwill impairment charge, a tax benefit of $31.4 million related to changes in uncertain tax positions primarily in the U.S. and Canada, and a tax benefit of $27.7 million related to an audit settlement in the U.S.

During fiscal 2018, we recorded a $38.1 million valuation allowance related to foreign tax credits as a result of U.S. federal tax law changes. In fiscal 2019, we released this valuation allowance due to sufficient positive evidence obtained during the quarter. The positive evidence included the issuance of regulations related to the Tax Act during the quarter and forecasting the utilization of the foreign tax credits within the foreseeable future.

During fiscal 2018, we effectively settled a U.S. federal income tax examination for URS pre-acquisition tax years 2012, 2013 and 2014 and recorded a benefit of $27.7 million related to various adjustments, in addition to the favorable settlement of R&D credits of $26.2 million recorded in fiscal 2018.

During fiscal 2018, President Trump signed the Tax Act into law. The Tax Act reduced our U.S. federal corporate tax rate from 35% to 21%, required companies to pay a one-time transition tax on accumulated earnings of foreign subsidiaries, created new taxes on certain foreign sourced earnings, and eliminated or reduced certain deductions.

In fiscal 2018, we remeasured certain deferred tax assets and liabilities based on the rates at which they were expected to reverse in the future, which is generally 21%. The provisional amount recorded related to the remeasurement of our deferred tax balance was a $32.0 million tax benefit. In addition, we released the deferred tax liability and recorded a tax benefit related to certain foreign subsidiaries for which the undistributed earnings are not intended to be reinvested indefinitely for $79.8 million and accrued current tax on these earnings as part of the one-time transition tax.

Also during fiscal 2018, we recorded a provisional amount for the one-time transition tax liability for our foreign subsidiaries resulting in an increase in income tax expense of $64.0 million. During fiscal 2019, we completed our calculation of the total foreign earnings and profits of our foreign subsidiaries and recorded a tax benefit of $1.5 million.

We are currently under tax audit in several jurisdictions including the U.S. and believe the outcomes which are reasonably possible within the next twelve months, including lapses in statutes of limitations, could result in future adjustments, but will not result in a material change in the liability for uncertain tax positions.

Certain operations in Canada continue to have losses and the associated valuation allowances could be reduced if and when our current and forecast profits trend turns and sufficient evidence exists to support the release of the related valuation allowance (approximately $39 million).

We regularly integrate and consolidate our business operations and legal entity structure, and such internal initiatives could impact the assessment of uncertain tax positions, indefinite reinvestment assertions and the realizability of deferred tax assets.

Net (Loss) Income Attributable to AECOM

The factors described above resulted in the net loss attributable to AECOM of $261.1 million for the year ended September 30, 2019, as compared to the net income attributable to AECOM of $136.5 million for the year ended September 30, 2018.

Results of Operations by Reportable Segment

Design and Consulting Services

	Fiscal Year Ended		Change	
	September 30, 2019	September 30, 2018	$	%
	($ in millions)			
Revenue	$ 8,268.2	$ 8,223.1	$ 45.1	0.5 %
Cost of revenue	7,722.3	7,783.9	(61.6)	(0.8)
Gross profit	$ 545.9	$ 439.2	$ 106.7	24.3 %

The following table presents the percentage relationship of statement of operations items to revenue:

	Fiscal Year Ended	
	September 30, 2019	September 30, 2018
Revenue	100.0 %	100.0 %
Cost of revenue	93.4	94.7
Gross profit	6.6 %	5.3 %

Revenue

Revenue for our DCS segment for the year ended September 30, 2019 increased $45.1 million, or 0.5%, to $8,268.2 million as compared to $8,223.1 million for the corresponding period last year.

The increase in revenue for the year ended September 30, 2019 was primarily attributable to an increase in the Americas of $150 million, largely due to increased work performed on a residential housing storm disaster relief program and an increase in Asia Pacific (APAC) of $40 million. These increases were partially offset by unfavorable impacts from foreign currency of $150 million.

Gross Profit

Gross profit for our DCS segment for the year ended September 30, 2019 increased $106.7 million, or 24.3%, to $545.9 million as compared to $439.2 million for the corresponding period last year. As a percentage of revenue, gross profit increased to 6.6% of revenue for the year ended September 30, 2019 from 5.3% in the corresponding period last year.

The increases in gross profit and gross profit as a percentage of revenue for the year ended September 30, 2019 were primarily due to increased revenues in the Americas, including the residential housing storm disaster relief program increase discussed above and reduced costs resulting from restructuring activities taken earlier in fiscal 2019.

Construction Services

	Fiscal Year Ended		Change	
	September 30, 2019	September 30, 2018	$	%
	($ in millions)			
Revenue	$ 7,778.8	$ 8,238.9	$ (460.1)	(5.6)%
Cost of revenue	7,723.4	8,198.5	(475.1)	(5.8)
Gross profit	$ 55.4	$ 40.4	$ 15.0	37.1 %

The following table presents the percentage relationship of statement of operations items to revenue:

	Fiscal Year Ended	
	September 30, 2019	September 30, 2018
Revenue	100.0 %	100.0 %
Cost of revenue	99.3	99.5
Gross profit	0.7 %	0.5 %

Revenue

Revenue for our CS segment for the year ended September 30, 2019 decreased $460.1 million, or 5.6%, to $7,778.8 million as compared to $8,238.9 million for the corresponding period last year.

The decrease in revenue for the year ended September 30, 2019 was primarily attributable to decreased construction management of airports in the U.S. and residential high-rise buildings in the city of New York of approximately $340 million and decreased revenue from our power and oil and gas businesses, partially due to divestitures.

Gross Profit

Gross profit for our CS segment for the year ended September 30, 2019 increased $15.0 million, or 37.1%, to $55.4 million as compared to $40.4 million for the corresponding period last year. As a percentage of revenue, gross profit increased to 0.7% of revenue for the year ended September 30, 2019 from 0.5% in the corresponding period last year.

The increase in gross profit for the year ended September 30, 2019 was primarily due to increased profitability in the oil and gas business in North America. This increase was partially offset by a benefit from project performance on a power contract in the United States in the three months ended December 31, 2017 that did not repeat in the current period. The increase was also offset by decreased performance on projects in our building construction business.

Management Services

	Fiscal Year Ended		Change	
	September 30, 2019	September 30, 2018	$	%
	($ in millions)			
Revenue	$ 4,118.1	$ 3,693.5	$ 424.6	11.5 %
Cost of revenue	3,914.2	3,522.5	391.7	11.1
Gross profit	$ 203.9	$ 171.0	$ 32.9	19.2 %

The following table presents the percentage relationship of statement of operations items to revenue:

	Fiscal Year Ended	
	September 30, 2019	September 30, 2018
Revenue	100.0 %	100.0 %
Cost of revenue	95.0	95.4
Gross profit	5.0 %	4.6 %

Revenue

Revenue for our MS segment for the year ended September 30, 2019 increased $424.6 million, or 11.5%, to $4,118.1 million as compared to $3,693.5 million for the corresponding period last year.

The increase in revenue for the year ended September 30, 2019 was primarily due to a project with the Department of Defense.

Gross Profit

Gross profit for our MS segment for the year ended September 30, 2019 increased $32.9 million, or 19.2%, to $203.9 million as compared to $171.0 million for the corresponding period last year. As a percentage of revenue, gross profit increased to 5.0% of revenue for the year ended September 30, 2019 from 4.6% in the corresponding period last year.

The increase in gross profit for the year ended September 30, 2019 was primarily due to the increased revenue from the project with the Department of Defense discussed above.

AECOM Capital

	Fiscal Year Ended		Change	
	September 30, 2019	September 30, 2018	$	%
	($ in millions)			
Revenue	$ 8.2	$ —	$ 8.2	NM *
Equity in earnings of joint ventures	17.7	15.2	2.5	16.4 %
General and administrative expenses	(4.9)	(11.2)	6.3	(56.3)%

* *NM — Not Meaningful*

Equity in earnings of joint ventures included a gain on the sale of a property.

Fiscal year ended September 30, 2018 compared to the fiscal year ended September 30, 2017

Consolidated Results

	Fiscal Year Ended		Change	
	September 30, 2018	September 30, 2017	$	%
	($ in millions)			
Revenue	$ 20,155.5	$ 18,203.4	$ 1,952.1	10.7 %
Cost of revenue	19,504.9	17,519.7	1,985.2	11.3
Gross profit	650.6	683.7	(33.1)	(4.8)
Equity in earnings of joint ventures	81.1	141.6	(60.5)	(42.7)
General and administrative expenses	(135.7)	(133.4)	(2.3)	1.7
Impairment of long-lived assets, including goodwill	(168.2)	—	(168.2)	NM*
Acquisition and integration expenses	—	(38.7)	38.7	(100.0)
(Loss) gain on disposal activities	(2.9)	0.6	(3.5)	NM*
Income from operations	424.9	653.8	(228.9)	(35.0)
Other income	20.1	6.7	13.4	200.0
Interest expense	(267.5)	(231.3)	(36.2)	15.7
Income before income tax (benefit) expense	177.5	429.2	(251.7)	(58.6)
Income tax (benefit) expense	(19.7)	7.7	(27.4)	(355.8)
Net income	197.2	421.5	(224.3)	(53.2)
Noncontrolling interests in income of consolidated subsidiaries, net of tax	(60.7)	(82.1)	21.4	(26.1)
Net income attributable to AECOM	$ 136.5	$ 339.4	$ (202.9)	(59.8)%

* *NM — Not Meaningful*

The following table presents the percentage relationship of statement of operations items to revenue:

	Fiscal Year Ended	
	September 30, 2018	September 30, 2017
Revenue	100.0 %	100.0 %
Cost of revenue	96.8	96.2
Gross profit	3.2	3.8
Equity in earnings of joint ventures	0.4	0.8
General and administrative expenses	(0.7)	(0.8)
Impairment of long-lived assets, including goodwill	(0.8)	0.0
Acquisition and integration expenses	0.0	(0.2)
(Loss) gain on disposal activities	0.0	0.0
Income from operations	2.1	3.6
Other income	0.1	0.0
Interest expense	(1.3)	(1.2)
Income before income tax (benefit) expense	0.9	2.4
Income tax (benefit) expense	(0.1)	0.1
Net income	1.0	2.3
Noncontrolling interests in income of consolidated subsidiaries, net of tax	(0.3)	(0.4)
Net income attributable to AECOM	0.7 %	1.9 %

Revenue

Our revenue for the year ended September 30, 2018 increased $1,952.1 million, or 10.7%, to $20,155.5 million as compared to $18,203.4 million for the year ended September 30, 2017.

The increase in revenue for the year ended September 30, 2018 was primarily attributable to increases in our DCS segment of $656.3 million, our CS segment of $943.3 million, and our MS segment of $352.5 million, as discussed further below.

In the course of providing our services, we routinely subcontract for services and incur other direct costs on behalf of our clients. These costs are passed through to clients and, in accordance with industry practice and GAAP, are included in our revenue and cost of revenue. Because subcontractor and other direct costs can change significantly from project to project and period to period, changes in revenue may not be indicative of business trends. Subcontractor and other direct costs for the years ended September 30, 2018 and 2017 were $10.7 billion and $9.2 billion, respectively. Subcontractor costs and other direct costs as a percentage of revenue, increased to 53% during the year ended September 30, 2018 from 51% during the year ended September 30, 2017 due to increased building construction in our CS segment, as discussed below.

Gross Profit

Our gross profit for the year ended September 30, 2018 decreased $33.1 million, or 4.8%, to $650.6 million as compared to $683.7 million for the year ended September 30, 2017. For the year ended September 30, 2018, gross profit, as a percentage of revenue, decreased to 3.2% from 3.8% in the year ended September 30, 2017.

Gross profit changes were due to the reasons noted in DCS, CS and MS segments below.

Equity in Earnings of Joint Ventures

Our equity in earnings of joint ventures for the year ended September 30, 2018 was $81.1 million as compared to $141.6 million in the year ended September 30, 2017.

During year ended September 30, 2017, ACAP completed a transaction to sell its 50% equity interest in Provost Square I LLC, an unconsolidated joint venture which invested in a real estate development in New Jersey, for $133 million, which resulted in a gain of $52 million in our fiscal 2017. During the three months ended September 30, 2018, ACAP completed several real estate transactions that resulted in total gains of $15.2 million and net cash proceeds of $102.8 million. Additionally, the decrease from prior year was due to approximately $15 million in reduced equity in earnings from decreased volume at joint ventures in our MS segment.

General and Administrative Expenses

Our general and administrative expenses for the year ended September 30, 2018 increased $2.3 million, or 1.7%, to $135.7 million as compared to $133.4 million for the year ended September 30, 2017. As a percentage of revenue, general and administrative expenses decreased to 0.7% for the year ended September 30, 2018 from 0.8% for the year ended September 30, 2017.

Impairment of Long-Lived Assets, Including Goodwill

Impairment of long-lived assets, including goodwill, was $168.2 million for the year ended September 30, 2018. The loss was due to the anticipated disposition of non-core oil and gas assets in North America from our CS segment after the second quarter of fiscal 2018. The anticipated disposition resulted in a remeasurement of the assets held for sale, which were recorded at their estimated fair values less costs to sell. Included in the impairment of long-lived assets was a goodwill impairment charge of $125.4 million. Goodwill associated with the assets held for sale was originally recognized in the acquisition of URS Corporation in October 2014. Weak market demand for oil and gas services in the Canadian oil sands, primarily due to volatile commodity prices for Western Canada Select, resulted in lower fair value than previously measured at our annual impairment testing date as of September 30, 2017. A portion of the assets classified as held for

sale at the end of the second quarter of fiscal 2018 were sold during the year ended September 30, 2018. We expect to sell the remaining assets held for sale within fiscal 2019.

Loss / Gain on Disposal Activities

Loss on disposal activities in the accompanying statements of operations for the year ended September 30, 2018 was $2.9 million compared to gain on disposal activities of $0.6 million for the year ended September 30, 2017. The loss on disposal activities in the current period relates to incremental losses on the disposal of specific non-core oil and gas assets in North America from our CS segment previously classified as assets held for sale.

Other Income

Our other income for the year ended September 30, 2018 increased $13.4 million to $20.1 million as compared to $6.7 million for the year ended September 30, 2017.

The increase in other income for the year ended September 30, 2018 was primarily due to a $9.1 million gain realized in the quarter ended March 31, 2018 from a foreign exchange forward contract entered into as part of the refinancing of our credit agreement.

Interest Expense

Our interest expense for the year ended September 30, 2018 was $267.5 million as compared to $231.3 million for the year ended September 30, 2017.

The increase in interest expense for the year ended September 30, 2018 was primarily due to a $34.5 million prepayment premium of our $800 million unsecured 5.750% Senior Notes due 2022 at a price of 104.3% during the quarter ended March 31, 2018.

Income Tax Benefit / Expense

Our income tax benefit for the year ended September 30, 2018 was $19.6 million compared to income tax expense of $7.7 million for the year ended September 30, 2017. The increase in tax benefit for the current period compared to the corresponding period last year is due primarily to a $47.8 million net benefit related to one-time U.S. federal tax law changes, a benefit of $37.2 million related to income tax credits and incentives, a benefit of $31.4 million related to changes in uncertain tax positions primarily in the U.S. and Canada, a benefit of $27.7 million related to an audit settlement in the U.S., a benefit of $18.5 million related to return to provision adjustments in the U.S. primarily due to changes in foreign tax credits, a decrease in overall pre-tax income of $251.7 million, and a reduced U.S. federal corporate tax rate of 24.5% for our fiscal year ending September 30, 2018. These benefits were partially offset by valuation allowance increases resulting in tax expense of $58.7 million including $38.1 million related to foreign tax credits as a result of U.S. federal tax law changes and tax expense of $33.9 million related to the goodwill impairment charge in the second quarter of fiscal 2018 which was non-deductible for tax purposes.

During the first quarter of 2018, President Trump signed what is commonly referred to as*The Tax Cuts and Jobs Act* (Tax Act) into law. The Tax Act reduced our U.S. federal corporate tax rate from 35% to a blended tax rate of 24.5% for our fiscal year ending September 30, 2018 and 21% for fiscal years thereafter, requires companies to pay a one-time transition tax on accumulated earnings of foreign subsidiaries, creates new taxes on foreign sourced earnings and eliminates or reduces deductions.

Given the significance of the Tax Act, the SEC staff issued Staff Accounting Bulletin No. 118 (SAB 118), which allows registrants to record provisional amounts during a one year “measurement period” similar to that used when accounting for business combinations. However, the measurement period is deemed to have ended earlier when the registrant has obtained, prepared and analyzed the information necessary to finalize its accounting. During the measurement period, impacts of the law are expected to be recorded at the time a reasonable estimate for all or a portion

of the effects can be made, and provisional amounts can be recognized and adjusted as information becomes available, prepared or analyzed.

During the fiscal year 2018, we recorded a $32.0 million provisional tax benefit related to the remeasurement of our U.S. deferred tax assets and liabilities based on the rates at which they are expected to reverse in the future, which is generally 21%. In addition, we released the deferred tax liability and recorded a tax benefit related to foreign subsidiaries for which the undistributed earnings are not intended to be reinvested indefinitely for $79.8 million and accrued current tax on these earnings as part of the one-time transition tax.

During the fiscal year 2018, we recorded a $64.0 million provisional amount for the one-time transition tax liability for our foreign subsidiaries. We have not yet completed our calculation of the total foreign earnings and profits of our foreign subsidiaries and accordingly this amount may change when we finalize the calculation of foreign earnings.

During the fourth quarter of 2018, we restructured certain operations in Canada which resulted in a release of a valuation allowance of $13.1 million. Other operations in Canada continue to have losses and the associated valuation allowances could be reduced if and when our current and forecast profits trend turns and sufficient evidence exists to support the release of the related valuation allowances (approximately $41 million). During the second quarter of 2017, valuation allowances in the amount of $59.9 million in the United Kingdom were released due to sufficient positive evidence.

During the fourth quarter of 2018, we effectively settled a U.S. federal income tax examination for URS pre-acquisition tax years 2012, 2013 and 2014 and recorded a benefit of $27.7 million related to various adjustments, in addition to the favorable settlement for R&D credits of $26.2 million recorded in the second quarter of 2018. We are currently under tax audit in several jurisdictions including the U.S and believe the outcomes which are reasonably possible within the next twelve months, including lapses in statutes of limitations, could result in adjustments, but will not result in a material change in the liability for uncertain tax positions.

We regularly integrate and consolidate our business operations and legal entity structure, and such internal initiatives could impact the assessment of uncertain tax positions, indefinite reinvestment assertions and the realizability of deferred tax assets.

Net Income Attributable to AECOM

The factors described above resulted in the net income attributable to AECOM of $136.5 million for the year ended September 30, 2018, as compared to the net income attributable to AECOM of $339.4 million for the year ended September 30, 2017.

Results of Operations by Reportable Segment

Design and Consulting Services

	Fiscal Year Ended		Change	
	September 30, 2018	September 30, 2017	$	%
	($ in millions)			
Revenue	$ 8,223.1	$ 7,566.8	$ 656.3	8.7 %
Cost of revenue	7,783.9	7,172.0	611.9	8.5
Gross profit	$ 439.2	$ 394.8	$ 44.4	11.2 %

The following table presents the percentage relationship of statement of operations items to revenue:

	Fiscal Year Ended	
	September 30, 2018	September 30, 2017
Revenue	100.0 %	100.0 %
Cost of revenue	94.7	94.8
Gross profit	5.3 %	5.2 %

Revenue

Revenue for our DCS segment for the year ended September 30, 2018 increased $656.3 million, or 8.7%, to $8,223.1 million as compared to $7,566.8 million for the year ended September 30, 2017.

The increase in revenue for the year ended September 30, 2018 was attributable to an increase in the Americas of $400 million, largely due to increased work performed on a residential housing storm disaster relief program. Additionally, the increase was due to increases in Asia Pacific (APAC) and Europe, Middle East and Africa (EMEA) of approximately $110 million and $40 million, respectively, and favorable impacts from foreign currency of $100 million.

Gross Profit

Gross profit for our DCS segment for the year ended September 30, 2018 increased $44.4 million, or 11.2%, to $439.2 million as compared to $394.8 million for the year ended September 30, 2017. As a percentage of revenue, gross profit increased to 5.3% of revenue for the year ended September 30, 2018 from 5.2% in the year ended September 30, 2017.

The increases in gross profit and gross profit as a percentage of revenue for the year ended September 30, 2018 were primarily due to increased revenues in the Americas, including the residential housing disaster relief program discussed above.

Construction Services

	Fiscal Year Ended		Change	
	September 30, 2018	September 30, 2017	$	%
	($ in millions)			
Revenue	$ 8,238.9	$ 7,295.6	$ 943.3	12.9 %
Cost of revenue	8,198.5	7,202.7	995.8	13.8
Gross profit	$ 40.4	$ 92.9	$ (52.5)	(56.5)%

The following table presents the percentage relationship of statement of operations items to revenue:

	Fiscal Year Ended	
	September 30, 2018	September 30, 2017
Revenue	100.0 %	100.0 %
Cost of revenue	99.5	98.7
Gross profit	0.5 %	1.3 %

Revenue

Revenue for our CS segment for the year ended September 30, 2018 increased $943.3 million, or 12.9%, to $8,238.9 million as compared to $7,295.6 million for the year ended September 30, 2017.

The increase in revenue for the year ended September 30, 2018 was primarily attributable to approximately $400 million in increased revenue due to the construction of residential high-rise buildings in the city of New York. Additionally, the increase was due to the inclusion of approximately $500 million of revenue from entities acquired during fiscal 2018 and the fourth quarter of fiscal 2017.

Gross Profit

Gross profit for our CS segment for the year ended September 30, 2018 decreased $52.5 million, or 56.5%, to $40.4 million as compared to $92.9 million for the year ended September 30, 2017. As a percentage of revenue, gross profit decreased to 0.5% of revenue for the year ended September 30, 2018 from 1.3% in the year ended September 30, 2017.

The decrease in gross profit and gross profit as a percentage of revenue for the year ended September 30, 2018 were primarily due to losses in the oil and gas business in North America of approximately $50 million, and projects in the construction services business, partially offset by earnings from entities acquired in fiscal 2017 and the revenue increase in our residential high-rise construction business noted above.

Management Services

	Fiscal Year Ended		Change	
	September 30, 2018	September 30, 2017	$	%
	($ in millions)			
Revenue	$ 3,693.5	$ 3,341.0	$ 352.5	10.6 %
Cost of revenue	3,522.5	3,145.0	377.5	12.0
Gross profit	$ 171.0	$ 196.0	$ (25.0)	(12.8)%

The following table presents the percentage relationship of statement of operations items to revenue:

	Fiscal Year Ended	
	September 30, 2018	September 30, 2017
Revenue	100.0 %	100.0 %
Cost of revenue	95.4	94.1
Gross profit	4.6 %	5.9 %

Revenue

Revenue for our MS segment for the year ended September 30, 2018 increased $352.5 million, or 10.6%, to $3,693.5 million as compared to $3,341.0 million for the year ended September 30, 2017.

The increase in revenue for the year ended September 30, 2018 was primarily due to various projects with the U.S. government, including projects with the United States Army in the Middle East and with the United States Air Force.

Gross Profit

Gross profit for our MS segment for the year ended September 30, 2018 decreased $25.0 million, or 12.8%, to $171.0 million as compared to $196.0 million for the year ended September 30, 2017. As a percentage of revenue, gross profit decreased to 4.6% of revenue for the year ended September 30, 2018 from 5.9% in the year ended September 30, 2017.

The decrease in gross profit and gross profit as a percentage of revenue for the year ended September 30, 2018 were primarily due to a benefit recorded in the first quarter of fiscal 2017 of $35 million from the favorable settlement of a federal lawsuit, net of legal fees, and $23 million of incentive fees earned on contracts with the Department of Energy, which did not repeat in the current year. These decreases were partially offset by the benefits of approximately $15 million

from an increase in anticipated recoveries on a contract with the Department of Energy recorded in the year ended September 30, 2018. Additionally, the decreases were offset by increased gross profits from projects with the United States Army in the Middle East and with the United States Air Force, discussed above.

AECOM Capital

	Fiscal Year Ended		Change	
	September 30, 2018	September 30, 2017	$	%
	($ in millions)			
Equity in earnings of joint ventures	$ 15.2	$ 57.7	$ (42.5)	(73.7)%
General and administrative expenses	(11.2)	(8.7)	(2.5)	28.7 %

During the three months ended June 30, 2017, ACAP completed a transaction to sell its 50% equity interest in Provost Square I LLC, an unconsolidated joint venture which invested in a real estate development in New Jersey, for $133 million, which resulted in a gain of $52 million in fiscal 2017. During the three months ended September 30, 2018, ACAP completed several real estate transactions that resulted in total gains of $15.2 million and net cash proceeds of $102.8 million.

Liquidity and Capital Resources

Cash Flows

Our principal sources of liquidity are cash flows from operations, borrowings under our credit facilities, and access to financial markets. Our principal uses of cash are operating expenses, capital expenditures, working capital requirements, acquisitions, repurchases of common stock, and repayment of debt. We believe our anticipated sources of liquidity including operating cash flows, existing cash and cash equivalents, borrowing capacity under our revolving credit facility and our ability to issue debt or equity, if required, will be sufficient to meet our projected cash requirements for at least the next twelve months. We sold non-core oil and gas assets in fiscal 2019. We expect to spend approximately $130 to $160 million in restructuring costs in fiscal 2020; and we are evaluating our geographic exposure as part of a proposed plan to exit more than 30 countries, subject to applicable laws, to improve profitability and reduce our risk profile.

Generally, we do not provide for U.S. taxes or foreign withholding taxes on gross book-tax basis differences in our non-U.S. subsidiaries because such basis differences are able to and intended to be reinvested indefinitely. At September 30, 2019, we have determined that we will continue to indefinitely reinvest the earnings of some foreign subsidiaries and therefore we will continue to account for these undistributed earnings based on our existing accounting under ASC 740 and not accrue additional tax outside of the one-time transition tax required under the Tax Act that was enacted on December 22, 2017. Determination of the amount of any unrecognized deferred income tax liability on this temporary difference is not practicable because of the complexities of the hypothetical calculation. Based on the available sources of cash flows discussed above, we anticipate we will continue to have the ability to permanently reinvest these remaining amounts.

At September 30, 2019, cash and cash equivalents were $1,080.4 million, an increase of $193.7 million, or 21.8%, from $886.7 million at September 30, 2018. The increase in cash and cash equivalents was primarily attributable to positive cash flows from operating activities, partially offset by repurchases of common stock and repayments of our credit agreement.

Net cash provided by operating activities was $777.6 million for the year ended September 30, 2019 as compared to $774.6 million for the year ended September 30, 2018. The change was primarily attributable to the timing of receipts and payments of working capital, which includes accounts receivable, contract assets, accounts payable, accrued expenses, and contract liabilities. The sale of trade receivables to financial institutions during the year ended September 30, 2019 provided a net benefit of $21.9 million as compared to $39.1 million during the year ended September 30, 2018. We expect to continue to sell trade receivables in the future as long as the terms continue to remain favorable to us.

Net cash used in investing activities was $146.8 million for the year ended September 30, 2019, as compared to $59.1 million for the year ended September 30, 2018. This increase in cash used was primarily attributable to an increase in net investments in unconsolidated joint ventures of $133.8 million primarily in our civil construction and ACAP businesses.

Net cash used in financing activities was $433.3 million for the year ended September 30, 2019, as compared to $624.9 million for the year ended September 30, 2018. This change was primarily attributable to reduced repurchases of common stock and lower repayments of borrowings under our credit agreements. Total borrowings may vary during the period. For the year ended September 30, 2019, our weighted average floating rate borrowings were $2,163.6 million.

AECOM Caribe, a subsidiary of the Company, has incurred payment delays supporting the storm recovery work in the U.S. Virgin Islands. AECOM Caribe signed several contracts with Virgin Islands authorities to provide emergency design, construction and technical services after two Category Five hurricanes devastated the Virgin Islands in 2017, that were dependent on federal funding. AECOM Caribe and its subcontractors have performed over $750 million of work under the Virgin Islands contracts and payment delays have increased working capital by over $150 million from September 30, 2018 to 2019. We are currently negotiating with the Virgin Island authorities and U.S. Federal Emergency Management Agency to modify the contract and accelerate funding for current and future contractual payments; however, we can provide no certainty as to the timing or amount of future payments.

Working Capital

Working capital, or current assets less current liabilities, increased $75.3 million, or 7.5%, to $1,072.9 million at September 30, 2019 from $997.6 million at September 30, 2018. Net accounts receivable and contract assets, net of contract liabilities, increased to $4,837.8 million at September 30, 2019 from $4,537.4 million at September 30, 2018. Working capital increased primarily due to ongoing storm recovery work in the U.S. Virgin Islands, as discussed above.

Days Sales Outstanding (DSO), which includes net accounts receivable and contract assets, net of contract liabilities, was 86 days at September 30, 2019 compared to 78 days at September 30, 2018.

In Note 4, Revenue Recognition, in the notes to our consolidated financial statements, a comparative analysis of the various components of accounts receivable is provided. Except for claims, substantially all contract assets are expected to be billed and collected within twelve months.

Contract assets related to claims are recorded only if it is probable that the claim will result in additional contract revenue and if the amount can be reliably estimated. In such cases, revenue is recorded only to the extent that contract costs relating to the claim have been incurred. Award fees in contract assets are accrued only when there is sufficient information to assess contract performance. On contracts that represent higher than normal risk or technical difficulty, award fees are generally deferred until an award fee letter is received.

Because our revenue depends to a great extent on billable labor hours, most of our charges are invoiced following the end of the month in which the hours were worked, the majority usually within 15 days. Other direct costs are normally billed along with labor hours. However, as opposed to salary costs, which are generally paid on either a bi-weekly or monthly basis, other direct costs are generally not paid until payment is received (in some cases in the form of advances) from the customers.

Debt

Debt consisted of the following:

	September 30, 2019	September 30, 2018
	(in millions)	
2014 Credit Agreement	$ 1,182.2	$ 1,433.8
2014 Senior Notes	800.0	800.0
2017 Senior Notes	1,000.0	1,000.0
URS Senior Notes	248.1	247.9
Other debt	208.8	191.8
Total debt	3,439.1	3,673.5
Less: Current portion of debt and short-term borrowings	(117.2)	(143.1)
Less: Unamortized debt issuance costs	(36.1)	(46.7)
Long-term debt	$ 3,285.8	$ 3,483.7

The following table presents, in millions, scheduled maturities of our debt as of September 30, 2019:

Fiscal Year	
2020	$ 117.2
2021	216.1
2022	317.5
2023	450.9
2024	15.4
Thereafter	2,322.0
Total	$ 3,439.1

2014 Credit Agreement

We entered into a credit agreement (Credit Agreement) on October 17, 2014, which, as amended to date, consists of (i) a term loan A facility that includes a $510 million (USD) term loan A facility with a term expiring on March 13, 2021 and a $500 million Canadian dollar (CAD) term loan A facility and a $250 million Australian dollar (AUD) term loan A facility, each with terms expiring on March 13, 2023; (ii) a $600 million term loan B facility with a term expiring on March 13, 2025; and (iii) a revolving credit facility in an aggregate principal amount of $1.35 billion with a term expiring on March 13, 2023. Some of our subsidiaries (Guarantors) have guaranteed the obligations of the borrowers under the Credit Agreement. The borrowers' obligations under the Credit Agreement are secured by a lien on substantially all of our assets and the Guarantors' pursuant to a security and pledge agreement (Security Agreement). The collateral under the Security Agreement is subject to release upon fulfillment of conditions specified in the Credit Agreement and Security Agreement.

The Credit Agreement contains covenants that limit our ability and the ability of some of our subsidiaries to, among other things: (i) create, incur, assume, or suffer to exist liens; (ii) incur or guarantee indebtedness; (iii) pay dividends or repurchase stock; (iv) enter into transactions with affiliates; (v) consummate asset sales, acquisitions or mergers; (vi) enter into various types of burdensome agreements; or (vii) make investments.

On July 1, 2015, the Credit Agreement was amended to revise the definition of "Consolidated EBITDA" to increase the allowance for acquisition and integration expenses related to our acquisition of URS.

On December 22, 2015, the Credit Agreement was amended to further revise the definition of "Consolidated EBITDA" by further increasing the allowance for acquisition and integration expenses related to the acquisition of URS and to allow for an internal corporate restructuring primarily involving our international subsidiaries.

On September 29, 2016, the Credit Agreement and the Security Agreement were amended to (i) lower the applicable interest rate margins for the term loan A and the revolving credit facilities, and lower the applicable letter of credit fees and commitment fees to the revised consolidated leverage levels; (ii) extend the term of the term loan A and the revolving credit facility to September 29, 2021; (iii) add a new delayed draw term loan A facility tranche in the amount of $185.0 million; (iv) replace the then existing $500 million performance letter of credit facility with a $500 million basket to enter into secured letters of credit outside the Credit Agreement; and (v) revise covenants, including the Maximum Consolidated Leverage Ratio, so that the step down from a 5.00 to a 4.75 leverage ratio is effective as of March 31, 2017 as well as the investment basket for our ACAP business.

On March 31, 2017, the Credit Agreement was amended to (i) expand the ability of restricted subsidiaries to borrow under "Incremental Term Loans;" (ii) revise the definition of "Working Capital" as used in "Excess Cash Flow;" (iii) revise the definitions for "Consolidated EBITDA" and "Consolidated Funded Indebtedness" to reflect the expected gain and debt repayment of an AECOM Capital disposition, which disposition was completed on April 28, 2017; and (iv) amend provisions relating to our ability to undertake internal restructuring steps to accommodate changes in tax laws.

On March 13, 2018, the Credit Agreement was amended to (i) refinance the existing term loan A facility to include a $510 million (US) term loan A facility with a term expiring on March 13, 2021 and a $500 million CAD term loan A facility and a $250 million AUD term loan A facility each with terms expiring on March 13, 2023; (ii) issue a new $600 million term loan B facility to institutional investors with a term expiring on March 13, 2025; (iii) increase the capacity of our revolving credit facility from $1.05 billion to $1.35 billion and extend its term until March 13, 2023; (iv) reduce our interest rate borrowing costs as follows: (a) the term loan B facility, at our election, Base Rate (as defined in the Credit Agreement) plus 0.75% or Eurocurrency Rate (as defined in the Credit Agreement) plus 1.75%, (b) the (USD) term loan A facility, at our election, Base Rate plus 0.50% or Eurocurrency Rate plus 1.50%, and (c) the Canadian (CAD) term loan A facility, the Australian (AUD) term loan A facility, and the revolving credit facility, an initial rate of, at our election, Base Rate plus 0.75% or Eurocurrency Rate plus 1.75%, and after the end of our fiscal quarter ended June 30, 2018, Base Rate loans plus a margin ranging from 0.25% to 1.00% or Eurocurrency Rate plus a margin from 1.25% to 2.00%, based on the Consolidated Leverage Ratio (as defined in the Credit Agreement); and (v) revise covenants including increasing the amounts available under the restricted payment negative covenant and revising the Maximum Consolidated Leverage Ratio (as defined in the Credit Agreement) to include a 4.5 leverage ratio through September 30, 2019 after which the leverage ratio steps down to 4.0.

On November 13, 2018, the Credit Agreement was amended to revise the definition of "Consolidated EBITDA" to increase corporate restructuring allowances and provide for additional flexibility under the covenants for non-core asset dispositions, among other changes.

Under the Credit Agreement, we are subject to a maximum consolidated leverage ratio and minimum consolidated interest coverage ratio at the end of each fiscal quarter. Our Consolidated Leverage Ratio was 3.4 at September 30, 2019. Our Consolidated Interest Coverage Ratio was 4.9 at September 30, 2019. As of September 30, 2019, we were in compliance with the covenants of the Credit Agreement.

At September 30, 2019 and 2018, outstanding standby letters of credit totaled $22.8 million and $28.7 million, respectively, under our revolving credit facilities. As of September 30, 2019 and 2018, we had $1,327.2 million and $1,321.3 million, respectively, available under our revolving credit facility.

2014 Senior Notes

On October 6, 2014, we completed a private placement offering of $800,000,000 aggregate principal amount of the unsecured 5.750% Senior Notes due 2022 (2022 Notes) and $800,000,000 aggregate principal amount of the unsecured 5.875% Senior Notes due 2024 (the 2024 Notes and, together with the 2022 Notes, the 2014 Senior Notes). On November 2, 2015, we completed an exchange offer to exchange the unregistered 2014 Senior Notes for registered notes, as well as all related guarantees. On March 16, 2018, we redeemed all of the 2022 Notes at a redemption price that was 104.313% of the principal amount outstanding plus accrued and unpaid interest. The March 16, 2018 redemption resulted in a $34.5 million prepayment premium, which was included in interest expense.

As of September 30, 2019, the estimated fair value of the 2024 Notes was approximately $866.0 million. The estimated fair value of the 2024 Notes as of September 30, 2019 was derived by taking the mid-point of the trading prices from an observable market input (Level 2) in the secondary bond market and multiplying it by the outstanding balance of the 2024 Notes.

At any time prior to July 15, 2024, we may redeem on one or more occasions all or part of the 2024 Notes at a redemption price equal to the sum of (i) 100% of the principal amount thereof, plus (ii) a "make-whole" premium as of the date of the redemption, plus any accrued and unpaid interest to the date of redemption. In addition, on or after July 15, 2024, the 2024 Notes may be redeemed at a redemption price of 100% of the principal amount thereof, plus accrued and unpaid interest to the date of redemption.

The indenture pursuant to which the 2024 Notes were issued contains customary events of default, including, among other things, payment default, exchange default, failure to provide notices thereunder and provisions related to bankruptcy events. The indenture also contains customary negative covenants.

We were in compliance with the covenants relating to the 2024 Notes as of September 30, 2019.

2017 Senior Notes

On February 21, 2017, we completed a private placement offering of $1,000,000,000 aggregate principal amount of our unsecured 5.125% Senior Notes due 2027 (the 2017 Senior Notes) and used the proceeds to immediately retire the remaining $127.6 million outstanding on the then existing term loan B facility as well as repay $600 million of the term loan A facility and $250 million of the revolving credit facility under our Credit Agreement. On June 30, 2017, we completed an exchange offer to exchange the unregistered 2017 Senior Notes for registered notes, as well as related guarantees.

As of September 30, 2019, the estimated fair value of the 2017 Senior Notes was approximately $1,041.3 million. The estimated fair value of the 2017 Senior Notes as of September 30, 2019 was derived by taking the mid-point of the trading prices from an observable market input (Level 2) in the secondary bond market and multiplying it by the outstanding balance of the 2017 Senior Notes. Interest will be payable on the 2017 Senior Notes at a rate of 5.125% per annum. Interest on the 2017 Senior Notes is payable semi-annually on March 15 and September 15 of each year, commencing on September 15, 2017. The 2017 Senior Notes will mature on March 15, 2027.

At any time and from time to time prior to December 15, 2026, we may redeem all or part of the 2017 Senior Notes, at a redemption price equal to 100% of their principal amount, plus a "make whole" premium as of the redemption date, and accrued and unpaid interest to the redemption date.

In addition, at any time and from time to time prior to March 15, 2020, we may redeem up to 35% of the original aggregate principal amount of the 2017 Senior Notes with the proceeds of one or more qualified equity offerings, at a redemption price equal to 105.125%, plus accrued and unpaid interest. Furthermore, at any time on or after December 15, 2026, we may redeem on one or more occasions all or part of the 2017 Senior Notes at a redemption price equal to 100% of their principal amount, plus accrued and unpaid interest.

The indenture pursuant to which the 2017 Senior Notes were issued contains customary events of default, including, among other things, payment default, exchange default, failure to provide notices thereunder and provisions related to bankruptcy events. The indenture also contains customary negative covenants.

We were in compliance with the covenants relating to the 2017 Senior Notes as of September 30, 2019.

URS Senior Notes

In connection with the acquisition of URS on October 17, 2014, we assumed the URS 3.85% Senior Notes due 2017 (2017 URS Senior Notes) and the URS 5.00% Senior Notes due 2022 (2022 URS Senior Notes), totaling $1.0 billion (URS Senior Notes). The URS acquisition triggered change in control provisions in the URS Senior Notes that allowed

the holders of the URS Senior Notes to redeem their URS Senior Notes at a cash price equal to 101% of the principal amount and, accordingly, we redeemed $572.3 million of the URS Senior Notes on October 24, 2014. The remaining 2017 URS Senior Notes matured and were fully redeemed on April 3, 2017 for $179.2 million using proceeds from a $185 million delayed draw term loan A facility tranche under the Credit Agreement. The 2022 URS Senior Notes are general unsecured senior obligations of AECOM Global II, LLC as successor in interest to URS and are fully and unconditionally guaranteed on a joint-and-several basis by some former URS domestic subsidiary guarantors.

As of September 30, 2019, the estimated fair value of the 2022 URS Senior Notes was approximately $256.0 million. The carrying value of the 2022 URS Senior Notes on our Consolidated Balance Sheets as of September 30, 2019 was $248.1 million. The estimated fair value of the 2022 URS Senior Notes as of September 30, 2019 was derived by taking the mid-point of the trading prices from an observable market input (Level 2) in the secondary bond market and multiplying it by the outstanding balance of the 2022 URS Senior Notes.

As of September 30, 2019, we were in compliance with the covenants relating to the 2022 URS Senior Notes.

Other Debt and Other Items

Other debt consists primarily of obligations under capital leases and loans, and unsecured credit facilities. Our unsecured credit facilities are primarily used for standby letters of credit issued in connection with general and professional liability insurance programs and for contract performance guarantees. At September 30, 2019 and September 30, 2018, these outstanding standby letters of credit totaled $470.9 million and $486.4 million, respectively. As of September 30, 2019, we had $473.2 million available under these unsecured credit facilities.

Effective Interest Rate

Our average effective interest rate on our total debt, including the effects of the interest rate swap agreements, during the years ended September 30, 2019, 2018 and 2017 was 4.8%, 4.6% and 4.6%, respectively.

Interest expense in the consolidated statement of operations included amortization of deferred debt issuance costs for the years ended ended September 30, 2019, 2018 and 2017 of $10.7 million, $18.1 million and $17.5 million, respectively.

Other Commitments

We enter into various joint venture arrangements to provide architectural, engineering, program management, construction management and operations and maintenance services. The ownership percentage of these joint ventures is typically representative of the work to be performed or the amount of risk assumed by each joint venture partner. Some of these joint ventures are considered variable interest. We have consolidated all joint ventures for which we have control. For all others, our portion of the earnings is recorded in equity in earnings of joint ventures. See Note 6, Joint Ventures and Variable Interest Entities, in the notes to our consolidated financial statements.

Other than normal property and equipment additions and replacements, expenditures to further the implementation of our various information technology systems, commitments under our incentive compensation programs, amounts we may expend to repurchase stock under our stock repurchase program and acquisitions from time to time and disposition costs, we currently do not have any significant capital expenditures or outlays planned except as described below. However, if we acquire additional businesses in the future or if we embark on other capital-intensive initiatives, additional working capital may be required.

Under our secured revolving credit facility and other facilities discussed in Other Debt and Other Items above, as of September 30, 2019, there was approximately $493.7 million outstanding under standby letters of credit primarily issued in connection with general and professional liability insurance programs and for contract performance guarantees. For those projects for which we have issued a performance guarantee, if the project subsequently fails to meet guaranteed performance standards, we may either incur significant additional costs or be held responsible for the costs incurred by the client to achieve the required performance standards.

We recognized on our balance sheet the funded status of our pension benefit plans, measured as the difference between the fair value of plan assets and the projected benefit obligation. At September 30, 2019, our defined benefit pension plans had an aggregate deficit (the excess of projected benefit obligations over the fair value of plan assets) of approximately $483.9 million. The total amounts of employer contributions paid for the year ended September 30, 2019 were $14.5 million for U.S. plans and $28.1 million for non-U.S. plans. Funding requirements for each plan are determined based on the local laws of the country where such plan resides. In some countries, the funding requirements are mandatory while in other countries, they are discretionary. There is a required minimum contribution for one of our domestic plans; however, we may make additional discretionary contributions. In the future, such pension funding may increase or decrease depending on changes in the levels of interest rates, pension plan performance and other factors. In addition, we have collective bargaining agreements with unions that require us to contribute to various third party multiemployer pension plans that we do not control or manage. In addition, we have collective bargaining agreements with unions that require us to contribute various third party multiemployer plans that we do not control or manage. For the year ended September 30, 2019, we contributed $52.3 million to multiemployer pension plans.

Commitments and Contingencies

We record amounts representing our probable estimated liabilities relating to claims, guarantees, litigation, audits and investigations. We rely in part on qualified actuaries to assist us in determining the level of reserves to establish for insurance-related claims that are known and have been asserted against us, and for insurance-related claims that are believed to have been incurred based on actuarial analysis, but have not yet been reported to our claims administrators as of the respective balance sheet dates. We include any adjustments to such insurance reserves in our consolidated results of operations. Our reasonably possible loss disclosures are presented on a gross basis prior to the consideration of insurance recoveries. We do not record gain contingencies until they are realized. In the ordinary course of business, we may not be aware that we or our affiliates are under investigation and may not be aware of whether or not a known investigation has been concluded.

In the ordinary course of business, we may enter into various arrangements providing financial or performance assurance to clients, lenders, or partners. Such arrangements include standby letters of credit, surety bonds, and corporate guarantees to support the creditworthiness or the project execution commitments of our affiliates, partnerships and joint ventures. Performance arrangements typically have various expiration dates ranging from the completion of the project contract and extending beyond contract completion in some circumstances such as for warranties. We may also guarantee that a project, when complete, will achieve specified performance standards. If the project subsequently fails to meet guaranteed performance standards, we may incur additional costs, pay liquidated damages or be held responsible for the costs incurred by the client to achieve the required performance standards. The potential payment amount of an outstanding performance arrangement is typically the remaining cost of work to be performed by or on behalf of third parties. Generally, under joint venture arrangements, if a partner is financially unable to complete its share of the contract, the other partner(s) may be required to complete those activities.

At September 30, 2019 and 2018, we were contingently liable in the amount of approximately $493.7 million and $515.1 million, respectively, in issued standby letters of credit and $4.8 billion and $5.3 billion, respectively, in issued surety bonds primarily to support project execution.

In the ordinary course of business, we enter into various agreements providing financial or performance assurances to clients on behalf of certain unconsolidated partnerships, joint ventures and other jointly executed contracts. These agreements are entered into primarily to support the project execution commitments of these entities.

Our investment adviser jointly manages, sponsors and owns equity interest in the AECOM-Canyon Equity Fund, L.P. (the “Fund”), in which we have an ongoing capital commitment to fund investments. At September 30, 2019, we have capital commitments of $35 million to the Fund over the next 10 years.

In addition, in connection with the investment activities of AECOM Capital and the Fund, we provide guarantees of contractual obligations, including guarantees for completion of projects, repayment of debt, environmental indemnity obligations and other lender required guarantees.

Department of Energy Deactivation, Demolition, and Removal Project

Washington Group International, an Ohio company, the former name of one of the Company's wholly-owned subsidiaries (AECOM E&C) executed a cost-reimbursable task order with the Department of Energy (DOE) in 2007 to provide deactivation, demolition and removal services at a New York State project site that, during 2010, experienced contamination and performance issues and remains uncompleted. In February 2011, AECOM E&C and the DOE executed a Task Order Modification that changed some cost-reimbursable contract provisions to at-risk. The Task Order Modification, including subsequent amendments, required the DOE to pay all project costs up to $106 million, required AECOM E&C and the DOE to equally share in all project costs incurred from $106 million to $146 million, and required AECOM E&C to pay all project costs exceeding $146 million.

Due to unanticipated requirements and permitting delays by federal and state agencies, as well as delays and related ground stabilization activities caused by Hurricane Irene in 2011, AECOM E&C has been required to perform work outside the scope of the Task Order Modification. In December 2014, AECOM E&C submitted claims against the DOE pursuant to the Contracts Disputes Acts seeking recovery of $103 million, including additional fees on changed work scope. AECOM E&C has incurred additional project costs outside the scope of the contract as a result of differing site and ground conditions and intends to submit additional formal claims against the DOE.

Due to significant delays and uncertainties about responsibilities for the scope of remaining work, final project completion costs and other associated costs have exceeded $100 million over the contracted and claimed amounts. AECOM E&C assets and liabilities, including the value of the above costs and claims, were measured at their fair value on October 17, 2014, the date the Company acquired AECOM E&C's parent company, which measurement has been reevaluated to account for developments pertaining to this matter. Deconstruction and decommissioning activities are completed and site restoration activities are completed. AECOM E&C increased its receivable during the quarter ended September 30, 2019. Such amount is included in the significant claims discussed in Note 4, Revenue Recognition, to the financial statements included in this report.

AECOM E&C can provide no certainty that it will recover the claims submitted against the DOE in December 2014, any future claims or any other project costs after December 2014 that AECOM E&C may be obligated to incur, which could have a material adverse effect on the Company's results of operations.

SR-91

One of the Company's wholly-owned subsidiaries, URS Corporation, a Nevada corporation, entered into a partial fixed cost and partial time and material design agreement in 2012 with a design build contractor for a state route highway construction project in Riverside County and Orange County, California. On April 1, 2017, URS Corporation filed an $8.2 million amended complaint in the Superior Court of California against the design build contractor for its failure to pay for services performed under the design agreement. On July 3, 2017, the design build contractor filed an amended cross-complaint against URS Corporation and the Company in Superior Court alleging breaches of contract, negligent interference and professional negligence pertaining to URS Corporation's performance of design services under the design agreement, seeking purported damages of $70 million. On May 4, 2018, the design build contractor dismissed its claims for negligent interference. On May 24, 2018, URS Corporation filed an $11.9 million second amended complaint in Superior Court against the design build contractor for its failure to pay for services performed under the design agreement. Jury trial commenced in Superior Court on July 1, 2019 and concluded on October 1, 2019. At the time of trial, URS was owed and claimed $4.9 million against the design build contractor, while the contractor counterclaimed for $103.7 million against URS Corporation and the Company. The jury issued a unanimouse verdict awarding URS Corporation $4.9 million and awarding the design build contractor $2.7 million.

URS Corporation and AECOM cannot provide assurances that URS Corporation will be successful in the recovery of the amounts owed to it under the design agreement or in their defense against the amounts alleged under the cross-complaint that they believe are without merit and that they intend to continue to vigorously defend against in any further proceedings. The potential range of loss in excess of any current accrual cannot be reasonably estimated at this time primarily because the matter involves complex factual and legal issues; there is uncertainty regarding damages, including due to liability of and payments, by third parties; and post-trial proceedings are ongoing.

New York Department of Environmental Conservation

The following separate matters pertain to government environmental allegations against one of the Company's wholly-owned subsidiaries, AECOM USA, Inc.

- In September 2017, AECOM USA, Inc. was advised by the New York State Department of Environmental Conservation (DEC) of allegations that it committed environmental permit violations pursuant to the New York Environmental Conservation Law (ECL) associated with AECOM USA, Inc.'s oversight of a stream restoration project for Schoharie County which could result in substantial penalties if calculated under the ECL's maximum civil penalty provisions. AECOM USA, Inc. disputes this claim and intends to continue to defend this matter vigorously; however, AECOM USA, Inc. cannot provide assurances that it will be successful in these efforts. The potential range of loss in excess of any current accrual cannot be reasonably estimated at this time primarily because the matter involves complex and unique environmental and regulatory issues; the project site involves the oversight and involvement of various local, state and federal government agencies; there is substantial uncertainty regarding any alleged damages; and the matter is in its preliminary stage of the government's claims and any negotiations of a consent order or other resolution.

- In December 2018, AECOM USA, Inc. was advised by DEC of allegations that, during AECOM USA, Inc.'s oversight of a remedial construction project in Poughkeepsie, New York, sheen escaped a containment boom line near the east bank of the Hudson River without proper notification to DEC and an unapproved dispersant was sprayed onto the Hudson River to control odors in violation of ECL. AECOM USA, Inc. denies these allegations but is working cooperatively with DEC to resolve the matter through a consent order.

Refinery Turnaround Project

AECOM E&C entered into an agreement to perform turnaround maintenance services during a planned shutdown at a refinery in Montana in December 2017. The turnaround project was completed in February 2019. Due to circumstances outside of AECOM E&C's control, including client directed changes and delays and the refinery's condition, AECOM E&C performed additional work outside of the contract over $90 million and is entitled to payment from the refinery owner of approximately $144 million. In March 2019, the refinery owner sent a letter to AECOM E&C alleging it incurred approximately $79 million in damages due to AECOM E&C's project performance. In April 2019, AECOM E&C filed and perfected a $132 million construction lien against the refinery owner for unpaid labor and materials costs. In August 2019, following a subcontractor complaint filed in the Thirteen Judicial District Court of Montana asserting claims against the refinery owner and AECOM E&C, the refinery owner crossclaimed against AECOM E&C and the subcontractor. In October 2019, following the subcontractor's dismissal of its claims, AECOM E&C removed the matter to federal court and cross claimed against the refinery owner. The Company's receivable relating to this claim is included within the significant claims discussed in Note 4, Revenue Recognition, to the financial statements included in this report.

AECOM E&C intends to vigorously prosecute and defend this matter; however, AECOM E&C cannot provide assurance that it will be successful in these efforts. The resolution of this matter and any potential range of loss cannot be reasonably determined or estimated at this time, primarily because the matter raises complex legal issues that AECOM E&C is continuing to assess.

Contractual Obligations and Commitments

The following summarizes our contractual obligations and commercial commitments as of September 30, 2019:

Contractual Obligations and Commitments	Total	Less than One Year	One to Three Years	Three to Five Years	More than Five Years
			(in millions)		
Debt	$ 3,439.1	$ 117.2	$ 533.6	$ 466.3	$ 2,322.0
Interest on debt	987.8	201.7	379.7	267.0	139.4
Operating leases	1,242.4	236.2	364.3	236.1	405.8
Pension funding obligations[1]	41.3	41.3	—	—	—
Total contractual obligations and commitments	$ 5,710.6	$ 596.4	$ 1,277.6	$ 969.4	$ 2,867.2

(1) Represents expected fiscal 2020 contributions to fund our defined benefit pension and other postretirement plans. Contributions beyond one year have not been included as amounts are not determinable.

New Accounting Pronouncements and Changes in Accounting

In May 2014, the Financial Accounting Standards Board (FASB) issued new accounting guidance which amended the existing accounting standards for revenue recognition. The new accounting guidance establishes principles for recognizing revenue upon the transfer of promised goods or services to customers, in an amount that reflects the expected consideration received in exchange for those goods or services. The Company adopted the new standard on October 1, 2018, using the modified retrospective method, which resulted in an adjustment to retained earnings of $7.0 million, net of tax. Detailed disclosures regarding the adoption and other required disclosures can be found in Note 4.

In February 2016, the FASB issued new accounting guidance which changes accounting requirements for leases. The new guidance requires lessees to recognize the assets and liabilities arising from all leases, including those classified as operating leases under previous accounting guidance, on the balance sheet. It also requires disclosure of key information about leasing arrangements to increase transparency and comparability among organizations. The new guidance will be effective for the Company's fiscal year beginning October 1, 2019 with early adoption permitted. The new guidance must be adopted using a modified retrospective transition approach and provides for some practical expedients. The Company will apply the guidance of the new standard as of the date of adoption, and will not recast prior periods. While the Company expects to expand its current disclosures as a result of adopting the new standard, it does not expect adoption to have a material impact on the consolidated results of operations. The Company expects to record approximately $0.7 billion of leased assets and $1.0 billion of lease liabilities related to its operating leases and an adjustment to retained earnings of $0.1 billion related to transition upon adoption.

In June 2016, the FASB issued a new credit loss standard that changes the impairment model for most financial assets and some other instruments. The new guidance will replace the current "incurred loss" approach with an "expected loss" model for instruments measured at amortized cost. It also simplifies the accounting model for purchased credit-impaired debt securities and loans. The guidance will be effective for the Company's fiscal year starting October 1, 2020. The Company is currently evaluating the impact that the new guidance will have on its consolidated financial statements.

In August 2016, the FASB issued new accounting guidance clarifying how entities should classify cash receipts and cash payments on the statement of cash flows. The new guidance also clarifies how the predominance principle should be applied when cash receipts and cash payments have aspects of more than one class of cash flows. The Company adopted the new standard on October 1, 2018 and the adoption of the standard did not have a material impact on its statement of cash flows.

In October 2016, the FASB issued additional guidance regarding accounting for intra-entity transfers of assets other than inventory. The new guidance will require companies to account for the income tax consequences of intra-entity transfers of assets other than inventory in the period the transfer occurs. The Company adopted this guidance on October 1, 2018, and the adoption resulted in a $5.5 million reduction to other non-current assets and retained earnings.

In January 2017, the FASB issued new accounting guidance that changes the definition of a business to assist companies with evaluating when a set of transferred assets and activities is a business. This guidance requires the buyer to evaluate if substantially all of the fair value of the gross assets acquired is concentrated in a single identifiable asset or group of assets. The Company elected to adopt this guidance on July 1, 2018 and the adoption of this guidance did not have a material impact on the Company's consolidated financial statements.

In January 2017, the FASB issued new accounting guidance to simplify the test for goodwill impairment. This guidance eliminates step two from the goodwill impairment test. Under the new guidance, an entity should recognize an impairment charge for the amount by which the carrying amount of a reporting unit exceeds its fair value. However, the loss recognized should not exceed the total amount of goodwill allocated to the reporting unit. The Company early adopted the new guidance on January 1, 2018 and the adoption of this guidance did not have a material impact on the Company's consolidated financial statements.

In March 2017, the FASB issued new guidance on how employers that sponsor defined benefit pension or other postretirement benefit plans present the net periodic benefit cost in the income statement. Under the new guidance, employers will present the service cost component of net periodic benefit cost in the same income statement line items as other employee compensation costs. The new guidance was effective for the Company on October 1, 2018. Adoption of the new guidance did not have a material impact on the Company's consolidated financial statements.

In August 2017, the FASB issued new accounting guidance on derivatives and hedging. This guidance better aligns an entity's risk management activities and financial reporting for hedging relationships through change to both the designation and measurement guidance for qualifying hedging relationships and the presentation of hedging results. The Company early adopted the guidance on January 1, 2018 and the adoption of this guidance did not have a material impact on the Company's consolidated financial statements.

Off-Balance Sheet Arrangements

We enter into various joint venture arrangements to provide architectural, engineering, program management, construction management and operations and maintenance services. The ownership percentage of these joint ventures is typically representative of the work to be performed or the amount of risk assumed by each joint venture partner. Some of these joint ventures are considered variable interest entities. We have consolidated all joint ventures for which we have control. For all others, our portion of the earnings are recorded in equity in earnings of joint ventures. See Note 6 in the notes to our consolidated financial statements. We do not believe that we have any off-balance sheet arrangements that have or are reasonably likely to have a current or future effect on our financial condition, changes in financial condition, revenues or expenses, results of operations, liquidity, capital expenditures or capital resources that would be material to investors.

ITEM 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

Financial Market Risks

We are exposed to market risk, primarily related to foreign currency exchange rates and interest rate exposure of our debt obligations that bear interest based on floating rates. We actively monitor these exposures. Our objective is to reduce, where we deem appropriate to do so, fluctuations in earnings and cash flows associated with changes in foreign exchange rates and interest rates. In order to accomplish this objective, we sometimes enter into derivative financial instruments, such as forward contracts and interest rate hedge contracts. It is our policy and practice to use derivative financial instruments only to the extent necessary to manage our exposures. We do not use derivative financial instruments for trading purposes.

Foreign Exchange Rates

We are exposed to foreign currency exchange rate risk resulting from our operations outside of the U.S. We use foreign currency forward contracts from time to time to mitigate foreign currency risk. We limit exposure to foreign currency fluctuations in most of our contracts through provisions that require client payments in currencies corresponding

to the currency in which costs are incurred. As a result of this natural hedge, we generally do not need to hedge foreign currency cash flows for contract work performed. The functional currency of our significant foreign operations is the respective local currency.

Interest Rates

Our Credit Agreement and certain other debt obligations are subject to variable rate interest which could be adversely affected by an increase in interest rates. As of September 30, 2019 and 2018, we had $1,182.2 million and $1,433.8 million, respectively, in outstanding borrowings under our term credit agreements and our revolving credit facility. Interest on amounts borrowed under these agreements is subject to adjustment based on specified levels of financial performance. The applicable margin that is added to the borrowing's base rate can range from 0.25% to 2.00%. For the year ended September 30, 2019, our weighted average floating rate borrowings were $2,163.6 million, or $1,521.4 million excluding borrowings with effective fixed interest rates due to interest rate swap agreements. If short term floating interest rates had increased by 1.00%, our interest expense for the year ended September 30, 2019 would have increased by $15.2 million. We invest our cash in a variety of financial instruments, consisting principally of money market securities or other highly liquid, short-term securities that are subject to minimal credit and market risk.

ITEM 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

AECOM
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September 30, 2019

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Report of Independent Registered Public Accounting Firm

The Board of Directors and Stockholders of AECOM

Opinion on the Financial Statements

We have audited the accompanying consolidated balance sheets of AECOM (the "Company") as of September 30, 2019 and 2018, the related consolidated statements of operations, comprehensive income (loss), stockholders' equity and cash flows for each of the three years in the period ended September 30, 2019, and the related notes and financial statement schedule listed in the Index at Item 15(a) (collectively referred to as the "consolidated financial statements"). In our opinion, the consolidated financial statements present fairly, in all material respects, the financial position of the Company at September 30, 2019 and 2018, and the results of its operations and its cash flows for each of the three years in the period ended September 30, 2019, in conformity with U.S. generally accepted accounting principles.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) ("PCAOB"), the Company's internal control over financial reporting as of September 30, 2019, based on criteria established in Internal Control-Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013 framework) and our report dated November 13, 2019 expressed an unqualified opinion thereon.

Basis for Opinion

These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on the Company's financial statements based on our audits. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether due to error or fraud. Our audits included performing procedures to assess the risks of material misstatement of the financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the financial statements. We believe that our audits provide a reasonable basis for our opinion.

Critical Audit Matters

The critical audit matters communicated below are matters arising from the current period audit of the financial statements that were communicated or required to be communicated to the audit committee and that: (1) relate to accounts or disclosures that are material to the financial statements and (2) involved our especially challenging, subjective, or complex judgments. The communication of critical audit matters does not alter in any way our opinion on the consolidated financial

statements, taken as a whole, and we are not, by communicating the critical audit matters below, providing separate opinions on the critical audit matters or on the accounts or disclosures to which they relate.

Revenue Recognition - Contract cost and claim recovery estimates

Description of the Matter

For the year ended September 30, 2019, contract revenues recognized by the Company were $20.2 billion. Contract revenues include $5.8 billion which relate to fixed price contracts. As described in Note 4 of the consolidated financial statements, the Company generally recognizes revenues for these contracts over time as performance obligations are satisfied. The Company generally measures its progress to completion using an input measure of total costs incurred divided by total costs expected to be incurred. In addition, the Company's estimate of transaction price includes variable consideration associated with claims only to the extent that a significant reversal would not be probable.

Recognition of revenue and profit over time as performance obligations are satisfied for long-term fixed price contracts is highly judgmental as it requires the Company to prepare estimates of total contract revenue and total contract costs, including costs to complete in-process contracts. These estimates are dependent upon a number of factors, including the accuracy of estimates made at the balance sheet date, such as engineering progress, material quantities, the achievement of milestones, penalty provisions, labor productivity and cost estimates.

As of September 30, 2019, significant claims amounted to approximately $340 million and were included as contract assets and other non-current assets on the consolidated balance sheet. Revenue recognition relating to claims is highly judgmental as the amount has been disputed by the customer and it requires the Company to prepare estimates of amounts expected to be recovered. Changes in recovery estimates can have a material effect on the amount of revenue recognized.

Auditing contract revenue recognition is complex and highly judgmental due to the variability and uncertainty associated with estimating the costs to complete and amounts expected to be recovered from claims. Changes in these estimates would have a significant effect on the amount of contract revenue recognized.

How We Addressed the Matter in Our Audit

We obtained an understanding, evaluated the design, and tested the operating effectiveness of controls that address the risk of material misstatement of contract revenue including those associated with cost to complete estimates for long-term fixed price contracts and estimates of amounts expected to be recovered from claims. For example, we tested controls over the Company's review of estimated direct and indirect costs to be incurred and estimates of claim recovery amounts.

To evaluate the Company's determination of estimated costs to complete, we selected a sample of contracts and, among other things, inspected the executed contracts including any significant amendments; conducted interviews with and inspected questionnaires prepared by project personnel; tested key components of the cost to complete estimates, including materials, labor, and subcontractors costs; reviewed support for estimates of project contingencies; compared actual project margins to historical and expected results; and recalculated revenues recognized.

To test revenue recognized relating to claims, we selected a sample of projects and evaluated the estimates made by management by reviewing documentation from management's specialists and external counsel to support the amount of the claim. We also tested management's estimation process by performing a lookback analysis to evaluate claims settled in the current year compared to management's prior year estimates.

Valuation of goodwill

Description of the Matter

As of September 30, 2019, the Company's goodwill was $5.3 billion. As discussed in Note 1 of the consolidated financial statements, in the fourth quarter of each fiscal year, the Company performs an annual goodwill impairment test for each reporting unit, and between annual tests if events occur or circumstances change which suggest that goodwill should be evaluated. As further discussed in Note 3, in the fourth quarter of fiscal year 2019, the Company recorded a $588.0 million goodwill impairment in one of its reporting units within its Construction Services segment.

Auditing management's annual goodwill impairment test is complex and highly judgmental due to the significant estimates required to determine the fair value of the reporting units. These fair value estimates are affected by significant assumptions including revenue growth rate, profitability, weighted average cost of capital, and terminal values, which reflect management's expectations about future market or economic conditions.

How We Addressed the Matter in Our Audit

We obtained an understanding, evaluated the design, and tested the operating effectiveness of controls over the Company's goodwill impairment review process including management's review of the significant assumptions used to determine the fair value of the reporting units.

To test the estimated fair value of its reporting units, with the support of a valuation specialist, we performed audit procedures that included, among others, assessing fair value methodologies and testing the significant assumptions discussed above and the underlying data used by the Company in its analysis. We compared the significant assumptions used by management to current industry and economic trends, historical operating results, contract backlog, changes to the Company's business operations and other relevant factors. We performed a lookback analysis to evaluate the accuracy of management's prior year revenue and profitability estimates. We performed sensitivity analyses of significant assumptions to evaluate the changes in the fair value of the reporting units that would result from changes in the assumptions. We also tested the reconciliation of the fair value of the reporting units to the market capitalization of the Company.

/s/ ERNST & YOUNG LLP

We have served as the Company's auditor since 1990.

Los Angeles, CA
November 13, 2019

Report of Independent Registered Public Accounting Firm

To the Board of Directors and Stockholders of AECOM

Opinion on Internal Control over Financial Reporting

We have audited AECOM's (the "Company") internal control over financial reporting as of September 30, 2019, based on criteria established in Internal Control — Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013 framework) (the "COSO criteria"). In our opinion, AECOM maintained, in all material respects, effective internal control over financial reporting as of September 30, 2019, based on the COSO criteria.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) ("PCAOB"), the 2019 consolidated financial statements of the Company and our report dated November 13, 2019 expressed an unqualified opinion thereon.

Basis for Opinion

The Company's management is responsible for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting included in the accompanying Management's Report on Internal Control over Financial Reporting. Our responsibility is to express an opinion on the Company's internal control over financial reporting based on our audit. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audit in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects.

Our audit included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, testing and evaluating the design and operating effectiveness of internal control based on the assessed risk, and performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

Definition and Limitations of Internal Control Over Financial Reporting

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

/s/ Ernst & Young LLP

Los Angeles, California
November 13, 2019

AECOM

Consolidated Balance Sheets
(in thousands, except share data)

	September 30, 2019	September 30, 2018
ASSETS		
CURRENT ASSETS:		
Cash and cash equivalents	$ 834,835	$ 642,168
Cash in consolidated joint ventures	245,519	244,565
Total cash and cash equivalents	1,080,354	886,733
Accounts receivable—net	3,517,072	3,307,851
Contract assets	2,260,580	2,160,970
Prepaid expenses and other current assets	627,550	585,152
Current assets held for sale	—	59,800
Income taxes receivable	49,089	126,816
TOTAL CURRENT ASSETS	7,534,645	7,127,322
PROPERTY AND EQUIPMENT—NET	559,399	614,062
DEFERRED TAX ASSETS—NET	245,331	159,396
INVESTMENTS IN UNCONSOLIDATED JOINT VENTURES	405,225	310,661
GOODWILL	5,275,281	5,921,116
INTANGIBLE ASSETS—NET	233,018	319,892
OTHER NON-CURRENT ASSETS	208,692	228,682
TOTAL ASSETS	$ 14,461,591	$ 14,681,131
LIABILITIES AND STOCKHOLDERS' EQUITY		
CURRENT LIABILITIES:		
Short-term debt	$ 47,835	$ 8,353
Accounts payable	2,954,719	2,726,047
Accrued expenses and other current liabilities	2,390,418	2,267,046
Income taxes payable	59,541	39,802
Contract liabilities	939,891	931,431
Current liabilities held for sale	—	22,300
Current portion of long-term debt	69,350	134,698
TOTAL CURRENT LIABILITIES	6,461,754	6,129,677
OTHER LONG-TERM LIABILITIES	304,606	329,457
DEFERRED TAX LIABILITY-NET	4,292	47,273
PENSION BENEFIT OBLIGATIONS	505,834	412,604
LONG-TERM DEBT	3,285,755	3,483,746
TOTAL LIABILITIES	10,562,241	10,402,757
COMMITMENTS AND CONTINGENCIES (Note 18)		
AECOM STOCKHOLDERS' EQUITY:		
Common stock—authorized, 300,000,000 shares of $0.01 par value as of September 30, 2019 and 2018; issued and outstanding 157,482,983 and 156,983,356 shares as of September 30, 2019 and 2018, respectively	1,575	1,570
Additional paid-in capital	3,953,650	3,846,392
Accumulated other comprehensive loss	(864,197)	(703,330)
Retained earnings	599,548	948,148
TOTAL AECOM STOCKHOLDERS' EQUITY	3,690,576	4,092,780
Noncontrolling interests	208,774	185,594
TOTAL STOCKHOLDERS' EQUITY	3,899,350	4,278,374
TOTAL LIABILITIES AND STOCKHOLDERS' EQUITY	$ 14,461,591	$ 14,681,131

See accompanying Notes to Consolidated Financial Statements.

AECOM

Consolidated Statements of Operations
(in thousands, except per share data)

	Fiscal Year Ended		
	September 30, 2019	September 30, 2018	September 30, 2017
Revenue	$ 20,173,329	$ 20,155,512	$ 18,203,402
Cost of revenue	19,359,884	19,504,863	17,519,682
Gross profit	813,445	650,649	683,720
Equity in earnings of joint ventures	80,990	81,133	141,582
General and administrative expenses	(148,123)	(135,787)	(133,309)
Restructuring costs	(95,446)	—	—
(Loss) gain on disposal activities	(10,381)	(2,949)	572
Impairment of long-lived assets, including goodwill	(615,400)	(168,178)	—
Acquisition and integration expenses	—	—	(38,709)
Income from operations	25,085	424,868	653,856
Other income	16,789	20,135	6,636
Interest expense	(225,994)	(267,519)	(231,310)
(Loss) income before income tax (benefit) expense	(184,120)	177,484	429,182
Income tax (benefit) expense	(130)	(19,643)	7,706
Net (loss) income	(183,990)	197,127	421,476
Noncontrolling interests in income of consolidated subsidiaries, net of tax	(77,060)	(60,659)	(82,086)
Net (loss) income attributable to AECOM	$ (261,050)	$ 136,468	$ 339,390
Net (loss) income attributable to AECOM per share:			
Basic	$ (1.66)	$ 0.86	$ 2.18
Diluted	$ (1.66)	$ 0.84	$ 2.13
Weighted average shares outstanding:			
Basic	157,044	159,101	155,728
Diluted	157,044	162,261	159,135

See accompanying Notes to Consolidated Financial Statements.

AECOM

Consolidated Statements of Comprehensive (Loss) Income
(in thousands)

	Fiscal Year Ended		
	September 30, 2019	September 30, 2018	September 30, 2017
Net (loss) income	$ (183,990)	$ 197,127	$ 421,476
Other comprehensive (loss) income, net of tax:			
Net unrealized (loss) gain on derivatives, net of tax	(13,972)	1,693	4,605
Foreign currency translation adjustments	(46,628)	(82,717)	65,389
Pension adjustments, net of tax	(100,367)	79,523	87,061
Other comprehensive (loss) income, net of tax	(160,967)	(1,501)	157,055
Comprehensive (loss) income, net of tax	(344,957)	195,626	578,531
Noncontrolling interests in comprehensive income of consolidated subsidiaries, net of tax	(76,960)	(61,827)	(82,220)
Comprehensive (loss) income attributable to AECOM, net of tax	$ (421,917)	$ 133,799	$ 496,311

See accompanying Notes to Consolidated Financial Statements.

AECOM

Consolidated Statements of Stockholders' Equity
(in thousands)

	Common Stock	Additional Paid-In Capital	Accumulated Other Comprehensive Loss	Retained Earnings	Total AECOM Stockholders' Equity	Non-Controlling Interests	Total Stockholder's Equity
BALANCE AT SEPTEMBER 30, 2016	1,539	3,604,519	(857,582)	618,445	3,366,921	185,568	3,552,489
Net income	—	—	—	339,390	339,390	82,086	421,476
Cumulative effect of accounting standard adoption	—	—	—	3,805	3,805	—	3,805
Other comprehensive income	—	—	156,921	—	156,921	134	157,055
Issuance of stock	41	66,624	—	—	66,665	—	66,665
Repurchases of stock	(7)	(25,071)	—	—	(25,078)	—	(25,078)
Proceeds from exercise of options	2	4,876	—	—	4,878	—	4,878
Stock based compensation	—	83,774	—	—	83,774	—	83,774
Acquisition of noncontrolling interests	—	(1,150)	—	—	(1,150)	—	(1,150)
Other transactions with noncontrolling interests	—	—	—	—	—	9,808	9,808
Contributions from noncontrolling interests	—	—	—	—	—	2,282	2,282
Distributions to noncontrolling interests	—	—	—	—	—	(61,318)	(61,318)
BALANCE AT SEPTEMBER 30, 2017	1,575	3,733,572	(700,661)	961,640	3,996,126	218,560	4,214,686
Net income	—	—	—	136,468	136,468	60,659	197,127
Other comprehensive loss	—	—	(2,669)	—	(2,669)	1,168	(1,501)
Issuance of stock	42	68,069	—	—	68,111	—	68,111
Repurchases of stock under stock repurchase program	(40)	—	—	(149,960)	(150,000)	—	(150,000)
Repurchases of stock	(8)	(31,093)	—	—	(31,101)	—	(31,101)
Proceeds from exercise of options	1	2,749	—	—	2,750	—	2,750
Stock based compensation	—	73,095	—	—	73,095	—	73,095
Other transactions with noncontrolling interests	—	—	—	—	—	(5,012)	(5,012)
Contributions from noncontrolling interests	—	—	—	—	—	7,729	7,729
Distributions to noncontrolling interests	—	—	—	—	—	(97,510)	(97,510)
BALANCE AT SEPTEMBER 30, 2018	1,570	3,846,392	(703,330)	948,148	4,092,780	185,594	4,278,374
Net loss	—	—	—	(261,050)	(261,050)	77,060	(183,990)
Cumulative effect of accounting standard adoption	—	—	—	(12,452)	(12,452)	—	(12,452)
Other comprehensive loss	—	—	(160,867)	—	(160,867)	(100)	(160,967)
Issuance of stock	44	66,517	—	—	66,561	—	66,561
Repurchases of stock	(39)	(23,071)	—	(75,098)	(98,208)	—	(98,208)
Stock based compensation	—	63,812	—	—	63,812	—	63,812
Other transactions with noncontrolling interests	—	—	—	—	—	16,208	16,208
Contributions from noncontrolling interests	—	—	—	—	—	5,069	5,069
Distributions to noncontrolling interests	—	—	—	—	—	(75,057)	(75,057)
BALANCE AT SEPTEMBER 30, 2019	$ 1,575	$ 3,953,650	$ (864,197)	$ 599,548	$ 3,690,576	$ 208,774	$ 3,899,350

See accompanying Notes to Consolidated Financial Statements.

AECOM

Consolidated Statements of Cash Flows
(in thousands)

	Fiscal Year Ended		
	September 30, 2019	September 30, 2018	September 30, 2017
CASH FLOWS FROM OPERATING ACTIVITIES:			
Net (loss) income	$ (183,990)	$ 197,127	$ 421,476
Adjustments to reconcile net (loss) income to net cash provided by operating activities:			
Depreciation and amortization	261,185	267,570	278,631
Equity in earnings of unconsolidated joint ventures	(80,990)	(81,133)	(141,582)
Distribution of earnings from unconsolidated joint ventures	65,954	118,712	137,031
Non-cash stock compensation	63,812	73,095	83,774
Prepayment premium on redemption of unsecured senior notes	—	34,504	—
Impairment of long-lived assets, including goodwill	615,400	168,178	—
Foreign currency translation	(19,099)	(48,270)	6,007
Write-off of debt issuance costs	—	7,048	—
Deferred income tax (benefit) expense	(98,015)	36,746	(49,856)
Loss (gain) on disposal activities	10,381	2,949	(572)
Other	5,899	(472)	(15,062)
Changes in operating assets and liabilities, net of effects of acquisitions:			
Accounts receivable and contract assets	(316,487)	(381,787)	(432,769)
Prepaid expenses and other assets	(16,576)	(75,980)	(21,780)
Accounts payable	251,410	474,950	292,496
Accrued expenses and other current liabilities	239,781	16,848	(53,126)
Contract liabilities	7,559	2,729	234,116
Other long-term liabilities	(48,399)	(39,887)	(68,714)
Income taxes payable	19,791	1,626	26,584
Net cash provided by operating activities	777,616	774,553	696,654
CASH FLOWS FROM INVESTING ACTIVITIES:			
Payments for business acquisitions, net of cash acquired	—	—	(103,075)
Proceeds from purchase price adjustment on business acquisition	—	2,203	—
Cash acquired from consolidation of joint venture	—	7,630	—
Proceeds from disposal of businesses, net of cash disposed	46,490	19,537	2,200
Investment in unconsolidated joint ventures	(141,769)	(91,030)	(59,684)
Return of investment in unconsolidated joint ventures	22,750	105,769	35,407
Proceeds from sale of investments	12,365	7,174	900
Payments for purchase of investments	(3,223)	(23,492)	—
Proceeds from disposal of property and equipment	17,291	26,401	7,895
Payments for capital expenditures	(100,664)	(113,279)	(86,354)
Net cash used in investing activities	(146,760)	(59,087)	(202,711)
CASH FLOWS FROM FINANCING ACTIVITIES:			
Proceeds from borrowings under credit agreements	7,700,774	8,529,014	5,953,249
Repayments of borrowings under credit agreements	(7,984,624)	(8,040,262)	(7,071,602)
Issuance of unsecured senior notes	—	—	1,000,000
Redemption of unsecured senior notes	—	(800,000)	(179,208)
Prepayment premium on redemption of unsecured senior notes	—	(34,504)	—
Cash paid for debt issuance costs	—	(12,181)	(13,041)
Proceeds from issuance of common stock	30,448	35,233	30,093
Proceeds from exercise of stock options	—	2,750	4,878
Payments to repurchase common stock	(98,208)	(179,466)	(25,078)
Net distributions to noncontrolling interests	(69,988)	(89,781)	(59,036)
Other financing activities	(11,681)	(35,671)	(26,745)
Net cash used in financing activities	(433,279)	(624,868)	(386,490)
EFFECT OF EXCHANGE RATE CHANGES ON CASH	(3,956)	(6,227)	2,764
NET INCREASE IN CASH AND CASH EQUIVALENTS	193,621	84,371	110,217
CASH AND CASH EQUIVALENTS AT BEGINNING OF YEAR	886,733	802,362	692,145
CASH AND CASH EQUIVALENTS AT END OF YEAR	$ 1,080,354	$ 886,733	$ 802,362
SUPPLEMENTAL CASH FLOW INFORMATION:			
Common stock issued in acquisitions	$ —	$ —	$ 36,611
Debt assumed from acquisitions	$ —	$ —	$ 31,353
Interest paid	$ (222,263)	$ (271,842)	$ (226,090)
Net income taxes refund received (taxes paid)	$ 2,500	$ (40,589)	$ (11,540)

See accompanying Notes to Consolidated Financial Statements.

AECOM

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

1. Significant Accounting Policies

Organization—AECOM and its consolidated subsidiaries provide planning, consulting, architectural and engineering design services to commercial and government clients worldwide in major end markets such as transportation, facilities, environmental, energy, water and government. The Company also provides construction services, including building construction and energy, infrastructure and industrial construction, primarily in the Americas. In addition, the Company provides program and facilities management and maintenance, training, logistics, consulting, technical assistance, and systems integration and information technology services, primarily for agencies of the U.S. government and also for national governments around the world.

Fiscal Year—The Company reports results of operations based on 52 or 53-week periods ending on the Friday nearest September 30. For clarity of presentation, all periods are presented as if the year ended on September 30. Fiscal years 2019, 2018 and 2017 each contained 52 weeks and ended on September 27, September 28, and September 29, respectively.

Use of Estimates—The preparation of financial statements in conformity with accounting principles generally accepted in the United States (GAAP) requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. The more significant estimates affecting amounts reported in the consolidated financial statements relate to revenues under long-term contracts and self-insurance accruals. Actual results could differ from those estimates.

Principles of Consolidation and Presentation—The consolidated financial statements include the accounts of all majority-owned subsidiaries and joint ventures in which the Company is the primary beneficiary. All inter-company accounts have been eliminated in consolidation. Also see Note 6 regarding joint ventures and variable interest entities.

Government Contract Matters—The Company's federal government and certain state and local agency contracts are subject to, among other regulations, regulations issued under the Federal Acquisition Regulations (FAR). These regulations can limit the recovery of certain specified indirect costs on contracts and subjects the Company to ongoing multiple audits by government agencies such as the Defense Contract Audit Agency (DCAA). In addition, most of the Company's federal and state and local contracts are subject to termination at the discretion of the client.

Audits by the DCAA and other agencies consist of reviews of the Company's overhead rates, operating systems and cost proposals to ensure that the Company accounted for such costs in accordance with the Cost Accounting Standards of the FAR (CAS). If the DCAA determines the Company has not accounted for such costs consistent with CAS, the DCAA may disallow these costs. There can be no assurance that audits by the DCAA or other governmental agencies will not result in material cost disallowances in the future.

Cash and Cash Equivalents—The Company's cash equivalents include highly liquid investments which have an initial maturity of three months or less.

Allowance for Doubtful Accounts—The Company records its accounts receivable net of an allowance for doubtful accounts. This allowance for doubtful accounts is estimated based on management's evaluation of the contracts involved and the financial condition of its clients. The factors the Company considers in its contract evaluations include, but are not limited to:

- Client type—federal or state and local government or commercial client;
- Historical contract performance;

- Historical collection and delinquency trends;
- Client credit worthiness; and
- General economic conditions.

Derivative Financial Instruments—The Company accounts for its derivative instruments as either assets or liabilities and carries them at fair value.

For derivative instruments that hedge the exposure to variability in expected future cash flows that are designated as cash flow hedges, the effective portion of the gain or loss on the derivative instrument is reported as a component of accumulated other comprehensive income in stockholders' equity and reclassified into income in the same period or periods during which the hedged transaction affects earnings. The ineffective portion of the gain or loss on the derivative instrument, if any, is recognized in current income. To receive hedge accounting treatment, cash flow hedges must be highly effective in offsetting changes to expected future cash flows on hedged transactions.

The net gain or loss on the effective portion of a derivative instrument that is designated as an economic hedge of the foreign currency translation exposure generated by the re-measurement of certain assets and liabilities denominated in a non-functional currency in a foreign operation is reported in the same manner as a foreign currency translation adjustment. Accordingly, any gains or losses related to these derivative instruments are recognized in current income.

Derivatives that do not qualify as hedges are adjusted to fair value through current income.

Fair Value of Financial Instruments—The Company determines the fair values of its financial instruments, including short-term investments, debt instruments and derivative instruments, and pension and post-retirement plan assets based on inputs or assumptions that market participants would use in pricing an asset or a liability. The Company categorizes its instruments using a valuation hierarchy for disclosure of the inputs used to measure fair value. This hierarchy prioritizes the inputs into three broad levels as follows: Level 1 inputs are quoted prices (unadjusted) in active markets for identical assets or liabilities; Level 2 inputs are quoted prices for similar assets and liabilities in active markets or inputs that are observable for the asset or liability, either directly or indirectly through market corroboration, for substantially the full term of the financial instrument; Level 3 inputs are unobservable inputs based on the Company's assumptions used to measure assets and liabilities at fair value. The classification of a financial asset or liability within the hierarchy is determined based on the lowest level input that is significant to the fair value measurement.

The carrying amounts of cash and cash equivalents, accounts receivable and accounts payable approximate fair value because of the short maturities of these instruments. The carrying amount of the revolving credit facility approximates fair value because the interest rates are based upon variable reference rates.

The Company's fair value measurement methods may produce a fair value calculation that may not be indicative of net realizable value or reflective of future fair values. Although the Company believes its valuation methods are appropriate and consistent with those used by other market participants, the use of different methodologies or assumptions to determine fair value could result in a different fair value measurement at the reporting date.

Property and Equipment—Property and equipment are recorded at cost and are depreciated over their estimated useful lives using the straight-line method. Expenditures for maintenance and repairs are expensed as incurred. Typically, estimated useful lives range from ten to forty-five years for buildings, three to ten years for furniture and fixtures and three to twelve years for computer systems and equipment. Leasehold improvements are amortized on a straight-line basis over the shorter of their estimated useful lives or the remaining terms of the underlying lease agreement.

Long-Lived Assets—Long-lived assets to be held and used are reviewed for impairment whenever events or circumstances indicate that the assets may not be recoverable. The carrying amount of an asset to be held and used is not recoverable if it exceeds the sum of the undiscounted cash flows expected from the use and eventual disposition of the asset. For assets to be held and used, impairment losses are recognized based upon the excess of the asset's carrying

amount over the fair value of the asset. For long-lived assets to be disposed, impairment losses are recognized at the lower of the carrying amount or fair value less cost to sell.

Goodwill and Acquired Intangible Assets—Goodwill represents the excess of amounts paid over the fair value of net assets acquired from an acquisition. In order to determine the amount of goodwill resulting from an acquisition, the Company performs an assessment to determine the value of the acquired company's tangible and identifiable intangible assets and liabilities. In its assessment, the Company determines whether identifiable intangible assets exist, which typically include backlog and customer relationships. Intangible assets are amortized over the period in which the contractual or economic benefits of the intangible assets are expected to be realized.

The Company tests goodwill for impairment annually for each reporting unit in the fourth quarter of the fiscal year and between annual tests, if events occur or circumstances change which suggest that goodwill should be evaluated. Such events or circumstances include significant changes in legal factors and business climate, recent losses at a reporting unit, and industry trends, among other factors. A reporting unit is defined as an operating segment or one level below an operating segment. The Company's impairment tests are performed at the operating segment level as they represent the Company's reporting units.

During the impairment test, the Company estimates the fair value of the reporting unit using income and market approaches, and compares that amount to the carrying value of that reporting unit. In the event the fair value of the reporting unit is determined to be less than the carrying value, goodwill is impaired, and an impairment loss is recognized equal to the excess, limited to the total amount of goodwill allocated to the reporting unit. See also Note 3.

Pension Plans—The Company has certain defined benefit pension plans. The Company calculates the market-related value of assets, which is used to determine the return-on-assets component of annual pension expense and the cumulative net unrecognized gain or loss subject to amortization. This calculation reflects the Company's anticipated long-term rate of return and amortization of the difference between the actual return (including capital, dividends, and interest) and the expected return over a five-year period. Cumulative net unrecognized gains or losses that exceed10% of the greater of the projected benefit obligation or the fair market related value of plan assets are subject to amortization.

Insurance Reserves—The Company maintains insurance for certain insurable business risks. Insurance coverage contains various retention and deductible amounts for which the Company accrues a liability based upon reported claims and an actuarially determined estimated liability for certain claims incurred but not reported. It is generally the Company's policy not to accrue for any potential legal expense to be incurred in defending the Company's position. The Company believes that its accruals for estimated liabilities associated with professional and other liabilities are sufficient and any excess liability beyond the accrual is not expected to have a material adverse effect on the Company's results of operations or financial position.

Foreign Currency Translation—The Company's functional currency is generally the U.S. dollar, except for foreign operations where the functional currency is generally the local currency. Results of operations for foreign entities are translated to U.S. dollars using the average exchange rates during the period. Assets and liabilities for foreign entities are translated using the exchange rates in effect as of the date of the balance sheet. Resulting translation adjustments are recorded as a foreign currency translation adjustment into other accumulated comprehensive income/(loss) in stockholders' equity.

The Company uses foreign currency forward contracts from time to time to mitigate foreign currency risk. The Company limits exposure to foreign currency fluctuations in most of its contracts through provisions that require client payments in currencies corresponding to the currency in which costs are incurred. As a result of this natural hedge, the Company generally does not need to hedge foreign currency cash flows for contract work performed.

Noncontrolling Interests—Noncontrolling interests represent the equity investments of the minority owners in the Company's joint ventures and other subsidiary entities that the Company consolidates in its financial statements.

Income Taxes—The Company files a consolidated U.S. federal corporate income tax return and combined / consolidated state tax returns and separate company state tax returns. The Company accounts for certain income and

expense items differently for financial reporting and income tax purposes. Deferred tax assets and liabilities are determined based on the difference between the financial statement and tax basis of assets and liabilities, applying enacted statutory tax rates in effect for the year in which the differences are expected to reverse. In determining the need for a valuation allowance, management reviews both positive and negative evidence, including the nature, frequency, and severity of cumulative financial reporting losses in recent years, the future reversal of existing temporary differences, predictability of future taxable income exclusive of reversing temporary differences of the character necessary to realize the asset, relevant carryforward periods, taxable income in carry-back years if carry-back is permitted under tax law, and prudent and feasible tax planning strategies that would be implemented, if necessary, to protect against the loss of the deferred tax asset that would otherwise expire. Based upon management's assessment of all available evidence, the Company has concluded that it is more likely than not that the deferred tax assets, net of valuation allowance, will be realized.

2. New Accounting Pronouncements and Changes in Accounting

In May 2014, the Financial Accounting Standards Board (FASB) issued new accounting guidance which amended the existing accounting standards for revenue recognition. The new accounting guidance establishes principles for recognizing revenue upon the transfer of promised goods or services to customers, in an amount that reflects the expected consideration received in exchange for those goods or services. The Company adopted the new standard on October 1, 2018, using the modified retrospective method, which resulted in an adjustment to retained earnings of $7.0 million, net of tax. Detailed disclosures regarding the adoption and other required disclosures can be found in Note 4.

In February 2016, the FASB issued new accounting guidance which changes accounting requirements for leases. The new guidance requires lessees to recognize the assets and liabilities arising from all leases, including those classified as operating leases under previous accounting guidance, on the balance sheet. It also requires disclosure of key information about leasing arrangements to increase transparency and comparability among organizations. The new guidance is effective for the Company's fiscal year beginning October 1, 2019. The new guidance must be adopted using a modified retrospective transition approach and provides for some practical expedients. The Company will apply the guidance of the new standard as of the date of adoption, and will not recast prior periods. While the Company expects to expand its current disclosures as a result of adopting the new standard, it does not expect adoption to have a material impact on the consolidated results of operations. The Company expects to record approximately $0.7 billion of leased assets and $1.0 billion of lease liabilities related to its operating leases and an adjustment to retained earnings of $0.1 billion related to transition upon adoption.

In June 2016, the FASB issued a new credit loss standard that changes the impairment model for most financial assets and some other instruments. The new guidance will replace the current "incurred loss" approach with an "expected loss" model for instruments measured at amortized cost. It also simplifies the accounting model for purchased credit-impaired debt securities and loans. The guidance will be effective for the Company's fiscal year starting October 1, 2020. The Company is currently evaluating the impact that the new guidance will have on its consolidated financial statements.

In August 2016, the FASB issued new accounting guidance clarifying how entities should classify cash receipts and cash payments on the statement of cash flows. The new guidance also clarifies how the predominance principle should be applied when cash receipts and cash payments have aspects of more than one class of cash flows. The Company adopted the new standard on October 1, 2018 and the adoption of the standard did not have a material impact on its statement of cash flows.

In October 2016, the FASB issued additional guidance regarding accounting for intra-entity transfers of assets other than inventory. The new guidance will require companies to account for the income tax consequences of intra-entity transfers of assets other than inventory in the period the transfer occurs. The Company adopted this guidance on October 1, 2018, and the adoption resulted in a $5.5 million reduction to other non-current assets and retained earnings.

In January 2017, the FASB issued new accounting guidance that changes the definition of a business to assist companies with evaluating when a set of transferred assets and activities is a business. This guidance requires the buyer to evaluate if substantially all of the fair value of the gross assets acquired is concentrated in a single identifiable asset or group of assets. The Company elected to adopt this guidance on July 1, 2018 and the adoption of this guidance did not have a material impact on the Company's consolidated financial statements.

In January 2017, the FASB issued new accounting guidance to simplify the test for goodwill impairment. This guidance eliminates step two from the goodwill impairment test. Under the new guidance, an entity should recognize an impairment charge for the amount by which the carrying amount of a reporting unit exceeds its fair value. However, the loss recognized should not exceed the total amount of goodwill allocated to the reporting unit. The Company early adopted the new guidance on January 1, 2018 and the adoption of this guidance did not have a material impact on the Company's consolidated financial statements.

In March 2017, the FASB issued new guidance on how employers that sponsor defined benefit pension or other postretirement benefit plans present the net periodic benefit cost in the income statement. Under the new guidance, employers will present the service cost component of net periodic benefit cost in the same income statement line items as other employee compensation costs. The new guidance was effective for the Company on October 1, 2018. Adoption of the new guidance did not have a material impact on the Company's consolidated financial statements.

In August 2017, the FASB issued new accounting guidance on derivatives and hedging. This guidance better aligns an entity's risk management activities and financial reporting for hedging relationships through change to both the designation and measurement guidance for qualifying hedging relationships and the presentation of hedging results. The Company early adopted the guidance on January 1, 2018 and the adoption of this guidance did not have a material impact on the Company's consolidated financial statements.

3. Business Acquisitions, Goodwill, and Intangible Assets

The Company completed one acquisition during the year ended September 30, 2018 for a total consideration of $5.6 million, which was accounted for under the acquisition method. Acquired tangible and intangible assets and liabilities were recognized on the acquisition date based upon their fair values. The determination of fair values of assets and liabilities acquired requires the Company to make estimates and use valuation techniques when market value is not readily available. Transaction costs associated with business acquisitions are expensed as they are incurred.

In the fourth quarter of fiscal 2019, the Company recorded a goodwill impairment in its self-perform at-risk construction businesses in its Construction Services segment. Total goodwill impairment was $588.0 million, which was recorded within Impairment of long-lived assets, including goodwill. Fair value was estimated using Level 3 inputs, such as forecasted cash flows, and Level 2 inputs, such as observed non-active market prices. The Company observed a reduction in the estimated fair value of the impaired reporting unit in connection with its continuing review of at-risk construction projects and reduction in its self-perform at-risk construction exposure. The Company identified incremental unfavorable trends in its cash flow expectations compared to prior periods, which resulted in a quantitative impairment assessment.

In the second quarter of fiscal 2018, management approved a plan to sell non-core oil and gas assets in North America, included in the Company's Construction Services segment (the Disposal Group). The Company classified the related assets and liabilities of the Disposal Group as held for sale in the consolidated balance sheet. In the third quarter of fiscal 2018, the Company sold a portion of the assets in the Disposal Group and recognized a $2.1 million loss on disposal. The remaining portion of the Disposal Group was sold in the third quarter of fiscal 2019 and the Company recognized a $7.4 million loss on disposal.

The Company recorded losses related to the remeasurement of the Disposal Group based on estimated fair value less costs to sell resulting in total asset impairments of $168.2 million, recorded in Impairment of assets held for sale, including goodwill in the second quarter of fiscal 2018. Fair value was estimated using Level 3 inputs, such as forecasted cash flows, and Level 2 inputs, including bid prices from potential buyers.

The changes in the carrying value of goodwill by reportable segment for the fiscal years ended September 30, 2019 and 2018 were as follows:

	Fiscal Year 2019				
	September 30, 2018	Disposal	Impairment	Foreign Exchange Impact	September 30, 2019
			(in millions)		
Design and Consulting Services	$ 3,189.2	$ (5.8)	$ —	$ (22.2)	$ 3,161.2
Construction Services	1,008.9	—	(588.0)	(3.3)	417.6
Management Services	1,723.0	(12.5)	—	(14.0)	1,696.5
Total	$ 5,921.1	$ (18.3)	$ (588.0)	$ (39.5)	$ 5,275.3

	Fiscal Year 2018				
	September 30, 2017	Measurement Period Adjustment	Impairment	Foreign Exchange Impact	September 30, 2018
			(in millions)		
Design and Consulting Services	$ 3,218.9	$ —	$ —	$ (29.7)	$ 3,189.2
Construction Services	1,049.9	91.0	(125.4)	(6.6)	1,008.9
Management Services	1,724.1	—	—	(1.1)	1,723.0
Total	$ 5,992.9	$ 91.0	$ (125.4)	$ (37.4)	$ 5,921.1

The gross amounts and accumulated amortization of the Company's acquired identifiable intangible assets with finite useful lives as of September 30, 2019 and 2018, included in intangible assets—net, in the accompanying consolidated balance sheets, were as follows:

	September 30, 2019			September 30, 2018			Amortization Period (years)
	Gross Amount	Accumulated Amortization	Intangible Assets, Net	Gross Amount	Accumulated Amortization	Intangible Assets, Net	
				(in millions)			
Backlog and customer relationships	$ 1,284.2	$ (1,051.2)	$ 233.0	$ 1,285.1	$ (966.0)	$ 319.1	1 - 11
Trademark / tradename	18.3	(18.3)	—	18.3	(17.5)	0.8	0.3 - 2
Total	$ 1,302.5	$ (1,069.5)	$ 233.0	$ 1,303.4	$ (983.5)	$ 319.9	

Amortization expense of acquired intangible assets included within cost of revenue was $86.0 million, $96.7 million, and $102.7 million for the years ended September 30, 2019, 2018 and 2017, respectively. The following table presents estimated amortization expense of existing intangible assets for the succeeding years:

Fiscal Year	(in millions)
2020	$ 68.9
2021	56.1
2022	43.4
2023	39.0
2024	20.2
Thereafter	5.4
Total	$ 233.0

4. Revenue Recognition

On October 1, 2018, the Company adopted FASB Accounting Standards Codification (ASC) 606 on a modified retrospective basis, which amended the accounting standards for revenue recognition. As a result, the new guidance was applied retrospectively to contracts which were not completed as of October 1, 2018. Contracts completed prior to October 1, 2018 were accounted for using the guidance in effect at that time. The cumulative effect of applying the new guidance was recorded as a reduction to retained earnings at October 1, 2018 of $7.0 million, net of tax. Consistent with the modified

retrospective transition approach, the comparative period was not adjusted to conform with current period presentation. The adjustment was primarily related to segmenting or combining contracts by performance obligations identified under the criteria of the new standard. Revenue recognized during the year ended September 30, 2019 increased $4.8 million, net of tax, due to the adoption of the new standard primarily in the Construction Services segment.

The new accounting guidance establishes principles for recognizing revenue upon the transfer of control of promised goods or services to customers, in an amount that reflects the expected consideration received in exchange for those goods or services. The Company generally recognizes revenues over time as performance obligations are satisfied. The Company generally measures its progress to completion using an input measure of total costs incurred divided by total costs expected to be incurred. In the course of providing its services, the Company routinely subcontracts for services and incurs other direct costs on behalf of its clients. These costs are passed through to clients and, in accordance with GAAP, are included in the Company's revenue and cost of revenue. These subcontractor and other direct costs for the years ended September 30, 2019, 2018 and 2017 were $10.3 billion, $10.7 billion and $9.2 billion, respectively.

Recognition of revenue and profit is dependent upon a number of factors, including the accuracy of a variety of estimates made at the balance sheet date, such as engineering progress, material quantities, the achievement of milestones, penalty provisions, labor productivity and cost estimates. Additionally, the Company is required to make estimates for the amount of consideration to be received, including bonuses, awards, incentive fees, claims, unpriced change orders, penalties, and liquidated damages. Variable consideration is included in the estimate of the transaction price only to the extent that a significant reversal would not be probable. Management continuously monitors factors that may affect the quality of its estimates, and material changes in estimates are disclosed accordingly.

The following summarizes the Company's major contract types:

Cost Reimbursable Contracts

Cost reimbursable contracts include cost-plus fixed fee, cost-plus fixed rate, and time-and-materials price contracts. Under cost-plus contracts, the Company charges clients for its costs, including both direct and indirect costs, plus a negotiated fee or rate. The Company recognizes revenue based on actual direct costs incurred and the applicable fixed rate or portion of the fixed fee earned as of the balance sheet date. Under time-and-materials price contracts, the Company negotiates hourly billing rates and charges its clients based on the actual time that it expends on a project. In addition, clients reimburse the Company for materials and other direct incidental expenditures incurred in connection with its performance under the contract. The Company may apply a practical expedient to recognize revenue in the amount in which it has the right to invoice if its right to consideration is equal to the value of performance completed to date.

Guaranteed Maximum Price Contracts (GMP)

GMP contracts share many of the same contract provisions as cost-plus and fixed-price contracts. As with cost-plus contracts, clients are provided a disclosure of all the project costs, and a lump sum or percentage fee is separately identified. The Company provides clients with a guaranteed price for the overall project (adjusted for change orders issued by clients) and a schedule including the expected completion date. Cost overruns or costs associated with project delays in completion could generally be the Company's responsibility. For many of the Company's commercial or residential GMP contracts, the final price is generally not established until the Company has subcontracted a substantial percentage of the trade contracts with terms consistent with the master contract, and it has negotiated additional contractual limitations, such as waivers of consequential damages as well as aggregate caps on liabilities and liquidated damages. Revenue is recognized for GMP contracts as project costs are incurred relative to total estimated project costs.

Fixed-Price Contracts

Fixed price contracts include both lump-sum and fixed-unit price contracts. Under lump-sum contracts, the Company performs all the work under the contract for a specified fee. Lump-sum contracts are typically subject to price adjustments if the scope of the project changes or unforeseen conditions arise. Under fixed-unit price contracts, the Company performs a number of units of work at an agreed price per unit with the total payment under the contract

determined by the actual number of units delivered. Revenue is recognized for fixed-price contracts using the input method measured on a cost-to-cost basis.

The following tables present the Company's revenues disaggregated by revenue sources:

	Fiscal Year Ended		
	September 30, 2019	September 30, 2018	September 30, 2017
	(in millions)		
Cost reimbursable	$ 10,414.2	$ 9,474.8	$ 8,737.6
Guaranteed maximum price	3,956.3	4,722.0	4,186.8
Fixed price	5,802.8	5,958.7	5,279.0
Total revenue	$ 20,173.3	$ 20,155.5	$ 18,203.4

	Fiscal Year Ended		
	September 30, 2019	September 30, 2018	September 30, 2017
	(in millions)		
Americas	$ 16,191.1	$ 15,951.4	$ 14,202.5
Europe, Middle East, Africa	2,213.1	2,727.0	2,648.2
Asia Pacific	1,769.1	1,477.1	1,352.7
Total revenue	$ 20,173.3	$ 20,155.5	$ 18,203.4

Revenues in Europe, Middle East, Africa and Asia Pacific are primarily reported in the Company's Design and Consulting Services segment. As of September 30, 2019, the Company had allocated $23.6 billion of transaction price to unsatisfied or partially satisfied performance obligations, of which approximately 60% is expected to be satisfied within the next twelve months.

The Company's timing of revenue recognition may not be consistent with its rights to bill and collect cash from its clients. Those rights are generally dependent upon advance billing terms, milestone billings based on the completion of certain phases of work or when services are performed. The Company's accounts receivable represent amounts billed to clients that have yet to be collected and represent an unconditional right to cash from its clients. Contract assets represent the amount of contract revenue recognized but not yet billed pursuant to contract terms or accounts billed after the balance sheet date. Contract liabilities represent billings as of the balance sheet date, as allowed under the terms of a contract, but not yet recognized as contract revenue pursuant to the Company's revenue recognition policy.

Net accounts receivable consisted of the following:

	Fiscal Year Ended	
	September 30, 2019	September 30, 2018
	(in millions)	
Billed	$ 2,931.7	$ 2,697.7
Contract retentions	641.5	661.7
Total accounts receivable—gross	3,573.2	3,359.4
Allowance for doubtful accounts	(56.1)	(51.6)
Total accounts receivable—net	$ 3,517.1	$ 3,307.8

Substantially all contract assets as of September 30, 2019 and 2018 are expected to be billed and collected withintwelve months, except for claims. Significant claims recorded in contract assets and other non-current assets were approximately $340 million and $266 million as of September 30, 2019 and 2018, respectively, and included amounts related to the Department of Energy Deactivation, Demolition, and Removal Project and the Refinery Turnaround Project discussed further in Note 18. Contract retentions represent amounts invoiced to clients where payments have been withheld from progress payments until the contracted work has been completed and approved by the client. These retention agreements vary from project to project and could be outstanding for several months or years.

Allowances for doubtful accounts have been determined through specific identification of amounts considered to be uncollectible and potential write-offs, plus a non-specific allowance for other amounts for which some potential loss has been determined to be probable based on current and past experience.

Other than the U.S. government, no single client accounted for more than 10% of the Company's outstanding receivables at September 30, 2019 and 2018.

The Company sold trade receivables and contract assets to financial institutions, of which $364.5 million and $334.2 million were outstanding as of September 30, 2019 and 2018, respectively. The Company does not retain financial or legal obligations for these receivables that would result in material losses. The Company's ongoing involvement is limited to the remittance of customer payments to the financial institutions with respect to the sold trade receivables.

5. Property and Equipment

Property and equipment, at cost, consists of the following:

	Fiscal Year Ended		
	September 30, 2019	September 30, 2018	Useful Lives (years)
	(in millions)		
Building and land	$ 44.7	$ 75.2	10 - 45
Leasehold improvements	394.9	399.2	1 - 20
Computer systems and equipment	788.2	741.2	3 - 12
Furniture and fixtures	138.3	132.5	3 - 10
Total	1,366.1	1,348.1	
Accumulated depreciation and amortization	(806.7)	(734.0)	
Property and equipment, net	$ 559.4	$ 614.1	

Depreciation expense for the fiscal years ended September 30, 2019, 2018 and 2017 were $164.5 million, $158.5 million, and $157.1 million, respectively. Depreciation is calculated using primarily the straight-line method over the estimated useful lives of the assets, or in the case of leasehold improvements and capitalized leases, the lesser of the remaining term of the lease or its estimated useful life.

6. Joint Ventures and Variable Interest Entities

The Company's joint ventures provide architecture, engineering, program management, construction management, operations and maintenance services and invests in real estate, public-private partnership (P3) and infrastructure projects. Joint ventures, the combination of two or more partners, are generally formed for a specific project. Management of the joint venture is typically controlled by a joint venture executive committee, comprised of representatives from the joint venture partners. The joint venture executive committee normally provides management oversight and controls decisions which could have a significant impact on the joint venture.

Some of the Company's joint ventures have no employees and minimal operating expenses. For these joint ventures, the Company's employees perform work for the joint venture, which is then billed to a third-party customer by the joint venture. These joint ventures function as pass through entities to bill the third-party customer. For consolidated joint ventures of this type, the Company records the entire amount of the services performed and the costs associated with these services, including the services provided by the other joint venture partners, in the Company's result of operations. For certain of these joint ventures where a fee is added by an unconsolidated joint venture to client billings, the Company's portion of that fee is recorded in equity in earnings of joint ventures.

The Company also has joint ventures that have their own employees and operating expenses, and to which the Company generally makes a capital contribution. The Company accounts for these joint ventures either as consolidated entities or equity method investments based on the criteria further discussed below.

The Company follows guidance on the consolidation of variable interest entities (VIEs) that requires companies to utilize a qualitative approach to determine whether it is the primary beneficiary of a VIE. The process for identifying the primary beneficiary of a VIE requires consideration of the factors that indicate a party has the power to direct the activities that most significantly impact the joint venture's economic performance, including powers granted to the joint venture's program manager, powers contained in the joint venture governing board and, to a certain extent, a company's economic interest in the joint venture. The Company analyzes its joint ventures and classifies them as either:

- a VIE that must be consolidated because the Company is the primary beneficiary or the joint venture is not a VIE and the Company holds the majority voting interest with no significant participative rights available to the other partners; or

- a VIE that does not require consolidation and is treated as an equity method investment because the Company is not the primary beneficiary or the joint venture is not a VIE and the Company does not hold the majority voting interest.

As part of the above analysis, if it is determined that the Company has the power to direct the activities that most significantly impact the joint venture's economic performance, the Company considers whether or not it has the obligation to absorb losses or rights to receive benefits of the VIE that could potentially be significant to the VIE.

Contractually required support provided to the Company's joint ventures is discussed in Note 18.

Summary of financial information of the consolidated joint ventures is as follows:

	September 30, 2019	September 30, 2018
	(in millions)	
Current assets	$ 956.0	$ 1,013.7
Non-current assets	166.8	192.7
Total assets	$ 1,122.8	$ 1,206.4
Current liabilities	$ 646.9	$ 724.2
Non-current liabilities	12.3	12.7
Total liabilities	659.2	736.9
Total AECOM equity	255.6	284.2
Noncontrolling interests	208.0	185.3
Total owners' equity	463.6	469.5
Total liabilities and owners' equity	$ 1,122.8	$ 1,206.4

Total revenue of the consolidated joint ventures was $2,463.6 million, $2,525.0 million, and $1,933.5 million for the years ended September 30, 2019, 2018 and 2017, respectively. The assets of the Company's consolidated joint ventures are restricted for use only by the particular joint venture and are not available for the general operations of the Company.

Summary of financial information of the unconsolidated joint ventures, as derived from their unaudited financial statements, is as follows:

	September 30, 2019	September 30, 2018
	(in millions)	
Current assets	$ 1,914.5	$ 1,903.3
Non-current assets	1,004.3	938.3
Total assets	$ 2,918.8	$ 2,841.6
Current liabilities	$ 1,443.8	$ 1,658.5
Non-current liabilities	183.4	224.3
Total liabilities	1,627.2	1,882.8
Joint ventures' equity	1,291.6	958.8
Total liabilities and joint ventures' equity	$ 2,918.8	$ 2,841.6
AECOM's investment in joint ventures	$ 405.2	$ 310.7

	Twelve Months Ended	
	September 30, 2019	September 30, 2018
	(in millions)	
Revenue	$ 4,463.3	$ 5,571.9
Cost of revenue	4,285.9	5,325.4
Gross profit	$ 177.4	$ 246.5
Net income	$ 176.8	$ 238.6

Summary of AECOM's equity in earnings of unconsolidated joint ventures is as follows:

	Fiscal Year Ended		
	September 30, 2019	September 30, 2018	September 30, 2017
	(in millions)		
Pass through joint ventures	$ 31.6	$ 34.1	$ 36.6
Other joint ventures	49.4	47.0	105.0
Total	$ 81.0	$ 81.1	$ 141.6

Included in equity of earnings above, the Company recorded a gain of $52 million from a sale of its 50% equity interest in Provost Square I LLC, an unconsolidated joint venture that invested in a real estate development in New Jersey, in fiscal year ended September 30, 2017.

7. Pension Benefit Obligations

In the U.S., the Company sponsors various qualified defined benefit pension plans. Benefits under these plans generally are based on the employee's years of creditable service and compensation; however, all U.S. defined benefit plans are closed to new participants and have frozen accruals.

The Company also sponsors various non-qualified plans in the U.S.; all of these plans are frozen. Outside the U.S., the Company sponsors various pension plans, which are appropriate to the country in which the Company operates, some of which are government mandated.

The following tables provide reconciliations of the changes in the U.S. and international plans' benefit obligations, reconciliations of the changes in the fair value of assets for the last three years ended September 30, and reconciliations of the funded status as of September 30 of each year.

	Fiscal Year Ended					
	September 30, 2019		September 30, 2018		September 30, 2017	
	U.S.	Int'l	U.S.	Int'l	U.S.	Int'l
	(in millions)					
Change in benefit obligation:						
Benefit obligation at beginning of year	$ 633.1	$ 1,188.8	$ 683.0	$ 1,333.5	$ 720.0	$ 1,406.2
Service cost	—	0.5	4.9	1.1	4.3	1.3
Participant contributions	0.2	0.3	0.2	0.4	0.1	0.4
Interest cost	23.8	29.7	20.7	32.0	19.2	28.3
Benefits and expenses paid	(36.0)	(41.2)	(37.8)	(53.7)	(37.9)	(48.3)
Actuarial (gain) loss	80.7	206.5	(38.5)	(87.7)	(22.7)	(98.6)
Plan settlements	(1.3)	(3.7)	—	(3.0)	—	—
Plan amendments	—	5.2	0.6	—	—	—
Plan curtailments	—	—	—	(0.1)	—	—
Foreign currency translation (gain) loss	—	(74.8)	—	(33.7)	—	44.2
Benefit obligation at end of year	$ 700.5	$ 1,311.3	$ 633.1	$ 1,188.8	$ 683.0	$ 1,333.5

	Fiscal Year Ended					
	September 30, 2019		September 30, 2018		September 30, 2017	
	U.S.	Int'l	U.S.	Int'l	U.S.	Int'l
	(in millions)					
Change in plan assets						
Fair value of plan assets at beginning of year	$ 455.5	$ 965.9	$ 470.4	$ 993.1	$ 456.9	$ 973.2
Actual return on plan assets	26.2	180.3	11.1	29.3	39.0	9.6
Employer contributions	14.5	28.1	11.6	27.8	12.3	25.8
Participant contributions	0.2	0.3	0.2	0.4	0.1	0.4
Benefits and expenses paid	(36.0)	(41.2)	(37.8)	(53.7)	(37.9)	(48.3)
Plan settlements	(1.3)	(3.7)	—	(3.0)	—	—
Foreign currency translation gain (loss)	—	(60.9)	—	(28.0)	—	32.4
Fair value of plan assets at end of year	$ 459.1	$ 1,068.8	$ 455.5	$ 965.9	$ 470.4	$ 993.1

	Fiscal Year Ended					
	September 30, 2019		September 30, 2018		September 30, 2017	
	U.S.	Int'l	U.S.	Int'l	U.S.	Int'l
	(in millions)					
Reconciliation of funded status:						
Funded status at end of year	$ (241.4)	$ (242.5)	$ (177.6)	$ (222.9)	$ (212.6)	$ (340.4)
Contribution made after measurement date	N/A	N/A	N/A	N/A	N/A	N/A
Net amount recognized at end of year	$ (241.4)	$ (242.5)	$ (177.6)	$ (222.9)	$ (212.6)	$ (340.4)

The following table sets forth the amounts recognized in the consolidated balance sheets as of September 30, 2019, 2018 and 2017:

	Fiscal Year Ended					
	September 30, 2019		September 30, 2018		September 30, 2017	
	U.S.	Int'l	U.S.	Int'l	U.S.	Int'l
	(in millions)					
Amounts recognized in the consolidated balance sheets:						
Other non-current assets	$ 2.7	$ 28.3	$ 2.5	$ 19.1	$ 2.3	$ 13.9
Accrued expenses and other current liabilities	(9.1)	—	(9.5)	—	(10.1)	—
Pension benefit obligations	(235.0)	(270.8)	(170.6)	(242.0)	(204.8)	(354.3)
Net amount recognized in the balance sheet	$ (241.4)	$ (242.5)	$ (177.6)	$ (222.9)	$ (212.6)	$ (340.4)

The following table details the reconciliation of amounts in the consolidated statements of stockholders' equity for the fiscal years ended September 30, 2019, 2018 and 2017:

	Fiscal Year Ended					
	September 30, 2019		September 30, 2018		September 30, 2017	
	U.S.	Int'l	U.S.	Int'l	U.S.	Int'l
	(in millions)					
Reconciliation of amounts in consolidated statements of stockholders' equity:						
Prior service (cost) credit	$ (0.7)	$ (1.2)	$ (0.8)	$ 4.1	$ (0.2)	$ 4.4
Net loss	(150.7)	(233.0)	(72.5)	(186.4)	(94.6)	(263.7)
Total recognized in accumulated other comprehensive loss	$ (151.4)	$ (234.2)	$ (73.3)	$ (182.3)	$ (94.8)	$ (259.3)

The components of net periodic benefit cost other than the service cost component are included in other income (expense) in the consolidated statement of operations. The following table details the components of net periodic benefit cost for the Company's pension plans for fiscal years ended September 30, 2019, 2018 and 2017:

	Fiscal Year Ended					
	September 30, 2019		September 30, 2018		September 30, 2017	
	U.S.	Int'l	U.S.	Int'l	U.S.	Int'l
	(in millions)					
Components of net periodic benefit cost:						
Service costs	$ —	$ 0.5	$ 4.9	$ 1.1	$ 4.3	$ 1.3
Interest cost on projected benefit obligation	23.8	29.7	20.7	32.0	19.2	28.3
Expected return on plan assets	(27.5)	(38.1)	(31.5)	(43.1)	(31.0)	(41.5)
Amortization of prior service costs (credits)	0.1	(0.1)	0.1	(0.1)	—	(0.2)
Amortization of net loss	3.6	4.1	4.0	8.2	4.3	13.0
Settlement loss recognized	0.2	0.8	—	0.3	—	—
Net periodic benefit cost	$ 0.2	$ (3.1)	$ (1.8)	$ (1.6)	$ (3.2)	$ 0.9

The amount of applicable deferred income taxes included in other comprehensive income arising from a change in net prior service cost and net gain/loss was $29.7 million, $19.1 million, and $27.6 million in the years ended September 30, 2019, 2018 and 2017, respectively.

Amounts included in accumulated other comprehensive loss as of September 30, 2019 that are expected to be recognized as components of net periodic benefit cost during fiscal 2020 are (in millions):

	U.S.	Int'l
Amortization of prior service credit	$ (0.1)	$ (0.1)
Amortization of net actuarial losses	(5.0)	(8.3)
Total	$ (5.1)	$ (8.4)

The table below provides additional year-end information for pension plans with accumulated benefit obligations in excess of plan assets.

	Fiscal Year Ended					
	September 30, 2019		September 30, 2018		September 30, 2017	
	U.S.	Int'l	U.S.	Int'l	U.S.	Int'l
	(in millions)					
Projected benefit obligation	$ 679.5	$ 1,141.9	$ 610.4	$ 1,002.6	$ 658.4	$ 1,158.3
Accumulated benefit obligation	679.5	1,132.7	610.4	991.9	658.4	1,145.7
Fair value of plan assets	454.8	871.2	451.5	760.7	466.4	804.2

Funding requirements for each pension plan are determined based on the local laws of the country where such pension plan resides. In certain countries, the funding requirements are mandatory while in other countries, they are discretionary. The Company currently intends to contribute $26.6 million to the international plans in fiscal 2020. The required minimum contributions for U.S. plans are not significant. In addition, the Company may make discretionary contributions. The Company currently intends to contribute $14.7 million to U.S. plans in fiscal 2020.

The table below provides the expected future benefit payments, in millions:

Year Ending September 30,	U.S.	Int'l
2020	$ 43.1	$ 46.6
2021	42.7	42.8
2022	41.1	43.9
2023	41.3	45.6
2024	41.3	46.5
2025-2029	203.2	250.7
Total	$ 412.7	$ 476.1

The underlying assumptions for the pension plans are as follows:

	Fiscal Year Ended					
	September 30, 2019		September 30, 2018		September 30, 2017	
	U.S.	Int'l	U.S.	Int'l	U.S.	Int'l
Weighted-average assumptions to determine benefit obligation:						
Discount rate	3.00 %	1.81 %	4.15 %	2.91 %	3.64 %	2.67 %
Salary increase rate	N/A	2.52 %	N/A	2.79 %	N/A	2.76 %
Weighted-average assumptions to determine net periodic benefit cost:						
Discount rate	4.15 %	2.91 %	3.60 %	2.67 %	3.41 %	2.35 %
Salary increase rate	N/A	2.79 %	N/A	2.76 %	N/A	2.61 %
Expected long-term rate of return on plan assets	7.00 %	4.43 %	7.00 %	4.73 %	7.00 %	5.10 %

Pension costs are determined using the assumptions as of the beginning of the plan year. The funded status is determined using the assumptions as of the end of the plan year.

The following table summarizes the Company's target allocation for 2019 and pension plan asset allocation, both U.S. and international, as of September 30, 2019 and 2018:

	Target Allocations		Percentage of Plan Assets as of September 30,			
			2019		2018	
	U.S.	Int'l	U.S.	Int'l	U.S.	Int'l
Asset Category:						
Equities	45 %	37 %	45 %	36 %	40 %	38 %
Debt	42	36	45	31	50	36
Cash	3	6	1	3	1	7
Property and other	10	21	9	30	9	19
Total	100 %	100 %	100 %	100 %	100 %	100 %

The Company's domestic and foreign plans seek a competitive rate of return relative to an appropriate level of risk depending on the funded status and obligations of each plan and typically employ both active and passive investment management strategies. The Company's risk management practices include diversification across asset classes and investment styles and periodic rebalancing toward asset allocation targets. The target asset allocation selected for each plan reflects a risk/return profile that the Company believes is appropriate relative to each plan's liability structure and return goals.

To develop the expected long-term rate of return on assets assumption, the Company considered the historical returns and the future expectations for returns for each asset class, as well as the target asset allocation of the pension portfolio and the diversification of the portfolio. This resulted in the selection of a 7.00% and 4.43% weighted-average long-term rate of return on assets assumption for the fiscal year ended September 30, 2019 for U.S. and non-U.S. plans, respectively.

As of September 30, 2019, the fair values of the Company's pension plan assets by major asset categories were as follows:

		Fair Value Measurement as of September 30, 2019			
	Total Carrying Value as of September 30, 2019	Quoted Prices in Active Markets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)	Investments measured at NAV
			(in millions)		
Cash and cash equivalents	$ 41.0	$ 26.4	$ 14.6	$ —	$ —
Equity and debt securities	115.5	115.5	—	—	—
Investment funds					
Diversified and equity funds	192.8	179.0	13.8	—	—
Fixed income funds	95.7	22.0	73.7	—	—
Common collective funds	897.0	—	—	—	897.0
Assets held by insurance company	26.8	—	—	26.8	—
Derivative instruments	159.1	—	159.1	—	—
Total	$ 1,527.9	$ 342.9	$ 261.2	$ 26.8	$ 897.0

As of September 30, 2018, the fair values of the Company's pension plan assets by major asset categories were as follows:

	Total Carrying Value as of September 30, 2018	Fair Value Measurement as of September 30, 2018			
		Quoted Prices in Active Markets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)	Investments measured at NAV
	(in millions)				
Cash and cash equivalents	$ 71.7	$ 37.1	$ 34.6	$ —	$ —
Equity and debt securities	153.4	153.4	—	—	—
Investment funds					
Diversified and equity funds	152.0	82.4	69.6	—	—
Fixed income funds	55.3	3.6	51.7	—	—
Hedge funds	15.0	—	—	15.0	—
Common collective funds	951.0	—	—	—	951.0
Assets held by insurance company	30.0	—	—	30.0	—
Derivative instruments	(7.0)	—	(7.0)	—	—
Total	$ 1,421.4	$ 276.5	$ 148.9	$ 45.0	$ 951.0

Changes for the year ended September 30, 2019 in the fair value of the Company's recurring post-retirement plan Level 3 assets are as follows:

	September 30, 2018 Beginning balance	Actual return on plan assets, relating to assets still held at reporting date	Actual return on plan assets, relating to assets sold during the period	Purchases, sales and settlements	Transfer into / (out of) Level 3	Change due to exchange rate changes	September 30, 2019 Ending balance
	(in millions)						
Level 3 Assets	$ 45.0	$ 0.4	$ (0.1)	$ (17.0)	$ —	$ (1.5)	$ 26.8

Changes for the year ended September 30, 2018, in the fair value of the Company's recurring post-retirement plan Level 3 assets are as follows:

	September 30, 2017 Beginning balance	Actual return on plan assets, relating to assets still held at reporting date	Actual return on plan assets, relating to assets sold during the period	Purchases, sales and settlements	Transfer into / (out of) Level 3	Change due to exchange rate changes	September 30, 2018 Ending balance
	(in millions)						
Level 3 Assets	$ 45.3	$ 0.4	$ —	$ 0.2	$ —	$ (0.9)	$ 45.0

Cash equivalents are mostly comprised of short-term money-market instruments and are valued at cost, which approximates fair value.

For equity investment funds not traded on an active exchange, or if the closing price is not available, the trustee obtains indicative quotes from a pricing vendor, broker, or investment manager. These funds are categorized as Level 2 if the custodian obtains corroborated quotes from a pricing vendor or categorized as Level 3 if the custodian obtains uncorroborated quotes from a broker or investment manager.

Fixed income investment funds categorized as Level 2 are valued by the trustee using pricing models that use verifiable observable market data (e.g., interest rates and yield curves observable at commonly quoted intervals), bids provided by brokers or dealers, or quoted prices of securities with similar characteristics.

Hedge funds categorized as Level 3 are valued based on valuation models that include significant unobservable inputs and cannot be corroborated using verifiable observable market data. Hedge funds are valued by independent administrators. Depending on the nature of the assets, the general partners or independent administrators use both the income and market approaches in their models. The market approach consists of analyzing market transactions for comparable assets while the income approach uses earnings or the net present value of estimated future cash flows adjusted for liquidity and other risk factors. As of September 30, 2019, there were no material changes to the valuation techniques.

Common collective funds are valued based on net asset value (NAV) per share or unit as a practical expedient as reported by the fund manager, multiplied by the number of shares or units held as of the measurement date. Accordingly, these NAV-based investments have been excluded from the fair value hierarchy. These collective investment funds have minimal redemption notice periods and are redeemable daily at the NAV, less transaction fees, without significant restrictions. There are no significant unfunded commitments related to these investments.

Multiemployer Pension Plans

The Company participates in over 200 construction-industry multiemployer pension plans. Generally, the plans provide defined benefits to substantially all employees covered by collective bargaining agreements. Under the Employee Retirement Income Security Act, a contributor to a multiemployer plan is liable, upon termination or withdrawal from a plan, for its proportionate share of a plan's unfunded vested liability. The Company's aggregate contributions to these multiemployer plans were $52.3 million and $49.8 million for the years ended September 30, 2019 and 2018, respectively. At September 30, 2019 and 2018, none of the plans in which the Company participates are individually significant to its consolidated financial statements.

8. Debt

Debt consisted of the following:

	September 30, 2019	September 30, 2018
	(in millions)	
2014 Credit Agreement	$ 1,182.2	$ 1,433.8
2014 Senior Notes	800.0	800.0
2017 Senior Notes	1,000.0	1,000.0
URS Senior Notes	248.1	247.9
Other debt	208.8	191.8
Total debt	3,439.1	3,673.5
Less: Current portion of debt and short-term borrowings	(117.2)	(143.1)
Less: Unamortized debt issuance costs	(36.1)	(46.7)
Long-term debt	$ 3,285.8	$ 3,483.7

The following table presents, in millions, scheduled maturities of the Company's debt as of September 30, 2019:

Fiscal Year	
2020	$ 117.2
2021	216.1
2022	317.5
2023	450.9
2024	15.4
Thereafter	2,322.0
Total	$ 3,439.1

2014 Credit Agreement

The Company entered into a credit agreement (Credit Agreement) on October 17, 2014, which, as amended to date, consists of (i) a term loan A facility that includes a $510 million (US) term loan A facility with a term expiring on March 13, 2021 and a $500 million Canadian dollar (CAD) term loan A facility and a $250 million Australian dollar (AUD) term loan A facility, each with terms expiring on March 13, 2023; (ii) a $600 million term loan B facility with a term expiring on March 13, 2025; and (iii) a revolving credit facility in an aggregate principal amount of $1.35 billion with a term expiring on March 13, 2023. Some of subsidiaries of the Company (Guarantors) have guaranteed the obligations of the borrowers under the Credit Agreement. The borrowers' obligations under the Credit Agreement are secured by a lien on substantially all of the assets of the Company and the Guarantors pursuant to a security and pledge agreement (Security Agreement). The collateral under the Security Agreement is subject to release upon fulfillment of conditions specified in the Credit Agreement and Security Agreement.

The Credit Agreement contains covenants that limit the ability of the Company and the ability of some of its subsidiaries to, among other things: (i) create, incur, assume, or suffer to exist liens; (ii) incur or guarantee indebtedness; (iii) pay dividends or repurchase stock; (iv) enter into transactions with affiliates; (v) consummate asset sales, acquisitions or mergers; (vi) enter into various types of burdensome agreements; or (vii) make investments.

On July 1, 2015, the Credit Agreement was amended to revise the definition of "Consolidated EBITDA" to increase the allowance for acquisition and integration expenses related to the Company's acquisition of URS.

On December 22, 2015, the Credit Agreement was amended to further revise the definition of "Consolidated EBITDA" by further increasing the allowance for acquisition and integration expenses related to the acquisition of URS and to allow for an internal corporate restructuring primarily involving the Company's international subsidiaries.

On September 29, 2016, the Credit Agreement and the Security Agreement were amended to (1) lower the applicable interest rate margins for the term loan A and the revolving credit facilities, and lower the applicable letter of credit fees and commitment fees to the revised consolidated leverage levels; (2) extend the term of the term loan A and the revolving credit facility to September 29, 2021; (3) add a new delayed draw term loan A facility tranche in the amount of $185.0 million; (4) replace the then existing $500 million performance letter of credit facility with a $500 million basket to enter into secured letters of credit outside the Credit Agreement; and (5) revise covenants, including the Maximum Consolidated Leverage Ratio so that the step down from a 5.00 to a 4.75 leverage ratio is effective as of March 31, 2017 as well as the investment basket for the Company's AECOM Capital business.

On March 31, 2017, the Credit Agreement was amended to (1) expand the ability of restricted subsidiaries to borrow under "Incremental Term Loans;" (2) revise the definition of "Working Capital" as used in "Excess Cash Flow;" (3) revise the definitions for "Consolidated EBITDA" and "Consolidated Funded Indebtedness" to reflect the expected gain and debt repayment of an AECOM Capital disposition, which disposition was completed on April 28, 2017; and (4) amend provisions relating to the Company's ability to undertake internal restructuring steps to accommodate changes in tax laws.

On March 13, 2018, the Credit Agreement was amended to (1) refinance the existing term loan A facility to include a $510 million (US) term loan A facility with a term expiring on March 13, 2021 and a $500 million CAD term

loan A facility and a $250 million AUD term loan A facility each with terms expiring on March 13, 2023; (2) issue a new $600 million term loan B facility to institutional investors with a term expiring on March 13, 2025; (3) increase the capacity of the Company's revolving credit facility from $1.05 billion to $1.35 billion and extend its term until March 13, 2023; (4) reduce the Company's interest rate borrowing costs as follows: (a) the term loan B facility, at the Company's election, Base Rate (as defined in the Credit Agreement) plus 0.75% or Eurocurrency Rate (as defined in the Credit Agreement) plus 1.75%, (b) the (US) term loan A facility, at the Company's election, Base Rate plus 0.50% or Eurocurrency Rate plus 1.50%, and (c) the Canadian (CAD) term loan A facility, the Australian (AUD) term loan A facility, and the revolving credit facility, an initial rate of, at the Company's election, Base Rate plus 0.75% or Eurocurrency Rate plus 1.75%, and after the end of the Company's fiscal quarter ended June 30, 2018, Base Rate loans plus a margin ranging from 0.25% to 1.00% or Eurocurrency Rate plus a margin from 1.25% to 2.00%, based on the Consolidated Leverage Ratio (as defined in the Credit Agreement); (5) revise covenants including increasing the amounts available under the restricted payment negative covenant and revising the Maximum Consolidated Leverage Ratio (as defined in the Credit Agreement) to include a 4.5 leverage ratio through September 30, 2019 after which the leverage ratio steps down to 4.0.

Under the Credit Agreement, the Company is subject to a maximum consolidated leverage ratio and minimum consolidated interest coverage ratio at the end of each fiscal quarter. The Company's Consolidated Leverage Ratio was 3.4 at September 30, 2019. The Company's Consolidated Interest Coverage Ratio was 4.9 at September 30, 2019. As of September 30, 2019, the Company was in compliance with the covenants of the Credit Agreement.

At September 30, 2019 and 2018, outstanding standby letters of credit totaled $22.8 million and $28.7 million, respectively, under the Company's revolving credit facilities. As of September 30, 2019 and 2018, the Company had $ 1,327.2 million and $1,321.3 million, respectively, available under its revolving credit facility.

2014 Senior Notes

On October 6, 2014, the Company completed a private placement offering of $800,000,000 aggregate principal amount of the unsecured 5.750% Senior Notes due 2022 (2022 Notes) and $800,000,000 aggregate principal amount of the unsecured 5.875% Senior Notes due 2024 (the 2024 Notes and, together with the 2022 Notes, the 2014 Senior Notes). On November 2, 2015, the Company completed an exchange offer to exchange the unregistered 2014 Senior Notes for registered notes, as well as all related guarantees. On March 16, 2018, the Company redeemed all of the 2022 Notes at a redemption price that was 104.313% of the principal amount outstanding plus accrued and unpaid interest. The March 16, 2018 redemption resulted in a $34.5 million prepayment premium, which was included in interest expense.

As of September 30, 2019, the estimated fair value of the 2024 Notes was approximately $866.0 million. The fair value of the 2024 Notes as of September 30, 2019 was derived by taking the mid-point of the trading prices from an observable market input (Level 2) in the secondary bond market and multiplying it by the outstanding balance of the 2024 Notes.

At any time prior to July 15, 2024, the Company may redeem on one or more occasions all or part of the 2024 Notes at a redemption price equal to the sum of (i) 100% of the principal amount thereof, plus (ii) a "make-whole" premium as of the date of the redemption, plus any accrued and unpaid interest to the date of redemption. In addition, on or after July 15, 2024, the 2024 Notes may be redeemed at a redemption price of 100% of the principal amount thereof, plus accrued and unpaid interest to the date of redemption.

The indenture pursuant to which the 2024 Notes were issued contains customary events of default, including, among other things, payment default, exchange default, failure to provide notices thereunder and provisions related to bankruptcy events. The indenture also contains customary negative covenants.

The Company was in compliance with the covenants relating to the 2024 Notes as of September 30, 2019.

2017 Senior Notes

On February 21, 2017, the Company completed a private placement offering of $1,000,000,000 aggregate principal amount of its unsecured 5.125% Senior Notes due 2027 (the 2017 Senior Notes) and used the proceeds to

immediately retire the remaining $127.6 million outstanding on the then existing term loan B facility as well as repay $600 million of the term loan A facility and $250 million of the revolving credit facility under its Credit Agreement. On June 30, 2017, the Company completed an exchange offer to exchange the unregistered 2017 Senior Notes for registered notes, as well as related guarantees.

As of September 30, 2019, the estimated fair value of the 2017 Senior Notes was approximately $1,041.3 million. The fair value of the 2017 Senior Notes as of September 30, 2019 was derived by taking the mid-point of the trading prices from an observable market input (Level 2) in the secondary bond market and multiplying it by the outstanding balance of the 2017 Senior Notes. Interest will be payable on the 2017 Senior Notes at a rate of 5.125% per annum. Interest on the 2017 Senior Notes is payable semi-annually on March 15 and September 15 of each year, commencing on September 15, 2017. The 2017 Senior Notes will mature on March 15, 2027.

At any time and from time to time prior to December 15, 2026, the Company may redeem all or part of the 2017 Senior Notes, at a redemption price equal to 100% of their principal amount, plus a “make whole” premium as of the redemption date, and accrued and unpaid interest to the redemption date.

In addition, at any time and from time to time prior to March 15, 2020, the Company may redeem up to 35% of the original aggregate principal amount of the 2017 Senior Notes with the proceeds of one or more qualified equity offerings, at a redemption price equal to 105.125%, plus accrued and unpaid interest. Furthermore, at any time on or after December 15, 2026, the Company may redeem on one or more occasions all or part of the 2017 Senior Notes at a redemption price equal to 100% of their principal amount, plus accrued and unpaid interest.

The indenture pursuant to which the 2017 Senior Notes were issued contains customary events of default, including, among other things, payment default, exchange default, failure to provide notices thereunder and provisions related to bankruptcy events. The indenture also contains customary negative covenants.

The Company was in compliance with the covenants relating to the 2017 Senior Notes as of September 30, 2019.

URS Senior Notes

In connection with the URS acquisition, the Company assumed the URS 3.85% Senior Notes due 2017 (2017 URS Senior Notes) and the URS 5.00% Senior Notes due 2022 (2022 URS Senior Notes), totaling $1.0 billion (URS Senior Notes). The URS acquisition triggered change in control provisions in the URS Senior Notes that allowed the holders of the URS Senior Notes to redeem their URS Senior Notes at a cash price equal to 101% of the principal amount and, accordingly, the Company redeemed $572.3 million of the URS Senior Notes on October 24, 2014. The remaining 2017 URS Senior Notes matured and were fully redeemed on April 3, 2017 for $179.2 million using proceeds from a $185 million delayed draw term loan A facility tranche under the Credit Agreement. The 2022 URS Senior Notes are general unsecured senior obligations of AECOM Global II, LLC as successor in interest to URS) and are fully and unconditionally guaranteed on a joint-and-several basis by some former URS domestic subsidiary guarantors.

As of September 30, 2019, the estimated fair value of the 2022 URS Senior Notes was approximately $256.0 million. The carrying value of the 2022 URS Senior Notes on the Company’s Consolidated Balance Sheets as of September 30, 2019 was $248.1 million. The fair value of the 2022 URS Senior Notes as of September 30, 2019 was derived by taking the mid-point of the trading prices from an observable market input (Level 2) in the secondary bond market and multiplying it by the outstanding balance of the 2022 URS Senior Notes.

As of September 30, 2019, the Company were in compliance with the covenants relating to the 2022 URS Senior Notes.

Other Debt and Other Items

Other debt consists primarily of obligations under capital leases and loans, and unsecured credit facilities. The Company's unsecured credit facilities are primarily used for standby letters of credit issued in connection with general and professional liability insurance programs and for contract performance guarantees. At September 30, 2019 and 2018, these outstanding standby letters of credit totaled $470.9 million and $486.4 million, respectively. As of September 30, 2019, the Company had $473.2 million available under these unsecured credit facilities.

Effective Interest Rate

The Company's average effective interest rate on its total debt, including the effects of the interest rate swap agreements, during the years ended September 30, 2019, 2018 and 2017 was 4.8%, 4.6% and 4.6%, respectively.

Interest expense in the consolidated statements of operations for the year ended September 30, 2019 included amortization of deferred debt issuance costs for the year ended September 30, 2019, 2018 and 2017 was $10.7 million, $18.1 million and $17.5 million, respectively.

9. Derivative Financial Instruments and Fair Value Measurements

The Company uses certain interest rate derivative contracts to hedge interest rate exposures on the Company's variable rate debt. The Company enters into foreign currency derivative contracts with financial institutions to reduce the risk that its cash flows and earnings will be adversely affected by foreign currency exchange rate fluctuations. The Company's hedging program is not designated for trading or speculative purposes.

The Company recognizes derivative instruments as either assets or liabilities on the accompanying consolidated balance sheets at fair value. The Company records changes in the fair value (i.e., gains or losses) of the derivatives that have been designated as accounting hedges in the accompanying consolidated statements of operations as cost of revenue, interest expense or to accumulated other comprehensive loss in the accompanying consolidated balance sheets.

Cash Flow Hedges

The Company uses interest rate swap agreements designated as cash flow hedges to fix the variable interest rates on portions of the Company's debt. The Company also uses foreign currency contracts designated as cash flow hedges to hedge forecasted revenue transactions denominated in currencies other than the U.S. dollar. The Company initially reports any gain on the effective portion of a cash flow hedge as a component of accumulated other comprehensive loss. Depending on the type of cash flow hedge, the gain is subsequently reclassified to either interest expense when the interest expense on the variable rate debt is recognized, or to cost of revenue when the hedged revenues are recorded. If the hedged transaction becomes probable of not occurring, any gain or loss related to interest rate swap agreements or foreign currency contracts would be recognized in other income (expense). Further, the Company excludes the change in the time value of the foreign currency contracts from the assessment of hedge effectiveness. The Company records the premium paid or time value of a contract on the date of purchase as an asset. Thereafter, the Company recognizes any change to this time value in cost of revenue.

The notional principal in U.S. dollar (USD), Canadian dollar (CAD), and Australian dollar (AUD), fixed rates and related expiration dates of the Company's outstanding interest rate swap agreements were as follows:

September 30, 2019			
Notional Amount Currency	Notional Amount (in millions)	Fixed Rate	Expiration Date
AUD	200.0	2.19 %	February 2021
CAD	400.0	2.49 %	September 2022
USD	200.0	2.60 %	February 2023

September 30, 2018			
Notional Amount Currency	Notional Amount (in millions)	Fixed Rate	Expiration Date
AUD	200.0	2.19 %	February 2021
CAD	400.0	2.49 %	September 2022
USD	200.0	2.60 %	February 2023

The notional principal of outstanding foreign currency contracts to purchase AUD was AUD 23.2 million (or $17.4 million) at September 30, 2019. The notional principal of outstanding foreign currency contracts to purchase AUD was AUD 65.2 million (or $49.1 million) at September 30, 2018.

Other Foreign Currency Forward Contracts

The Company uses foreign currency forward contracts which are not designated as accounting hedges to hedge intercompany transactions and other monetary assets or liabilities denominated in currencies other than the functional currency of a subsidiary. Gains and losses on these contracts were not material for the years ended September 30, 2019, 2018 and 2017.

Fair Value Measurements

The Company's non-pension financial assets and liabilities recorded at fair values relate to derivative instruments and were not material at September 30, 2019 or 2018.

See Note 17 for accumulated balances and reporting period activities of derivatives related to reclassifications out of accumulated other comprehensive income or loss for the years ended September 30, 2019, 2018 and 2017. Amounts recognized in accumulated other comprehensive loss from the Company's foreign currency options were immaterial for all years presented. Amounts reclassified from accumulated other comprehensive loss into income from the foreign currency options were immaterial for all years presented. Additionally, there were no material losses recognized in income due to amounts excluded from effectiveness testing from the Company's interest rate swap agreements.

10. Concentration of Credit Risk

Financial instruments which potentially subject the Company to concentrations of credit risk consist principally of cash investments and trade receivables. The Company's cash balances and short-term investments are maintained in accounts held by major banks and financial institutions located primarily in the U.S., Canada, Europe, Australia, Middle East and Hong Kong. If the Company extends significant credit to clients in a specific geographic area or industry, the Company may experience disproportionately high levels of default if those clients are adversely affected by factors particular to their geographic area or industry. Concentrations of credit risk with respect to trade receivables are limited due to the large number of customers comprising the Company's customer base, including, in large part, governments, government agencies and quasi-government organizations, and their dispersion across many different industries and geographies. See Note 4 regarding the Company's foreign revenues. In order to mitigate credit risk, the Company continually reviews the credit worthiness of its major private clients.

11. Leases

The Company and its subsidiaries are lessees in non-cancelable leasing agreements for office buildings and equipment. The related payments are expensed on a straight-line basis over the lease term, including, as applicable, any free-rent period during which the Company has the right to use the asset. For leases with renewal options where the renewal is reasonably assured, the lease term, including the renewal period is used to determine the appropriate lease classification

and to compute periodic rental expense. The following table presents, in millions, amounts payable under non-cancelable operating lease commitments during the following fiscal years:

Year Ending September 30,	
2020	$ 236.2
2021	198.3
2022	166.0
2023	131.1
2024	105.0
Thereafter	405.8
Total	$ 1,242.4

Rent expense for leases for the years ended September 30, 2019, 2018 and 2017 was approximately $258.1 million, $268.5 million, and $265.9 million, respectively. When the Company is required to restore leased facilities to original condition, provisions are made over the period of the lease.

12. Stockholders' Equity

Common Stock Units—Common stock units are only redeemable for common stock. In the event of liquidation of the Company, holders of stock units are entitled to no greater rights than holders of common stock. See also Note 13.

Accelerated Share Repurchase—In August 2018, the Company entered into an accelerated share repurchase (ASR) with JPMorgan Chase Bank, National Association (JPMorgan) to repurchase $150 million of its common stock. During the quarter ended September 30, 2018, JPMorgan delivered 4.0 million shares to the Company, at which point the Company's shares outstanding were reduced and accounted for as a reduction to retained earnings. The initial share delivery represented the minimum amount of shares JPMorgan was contractually obligated to provide under the ASR agreement. The ASR completed on October 11, 2018, which resulted in the delivery of an additional 0.6 million shares to the Company from JPMorgan.

13. Share-Based Payments

Defined Contribution Plans—Substantially all permanent domestic employees are eligible to participate in defined contribution plans provided by the Company. Under these plans, participants may make contributions into a variety of funds, including a fund that is fully invested in Company stock. Employees are not required to allocate any funds to Company stock; however, the Company does provide an annual Company match in AECOM shares. Employees may generally reallocate their account balances on a daily basis; however, employees classified as insiders are restricted under the Company's insider trading policy. Compensation expense relating to these employer contributions related to AECOM stock under defined contribution plans for fiscal years ended September 30, 2019, 2018 and 2017 was $32.3 million, $32.3 million, and $32.9 million, respectively.

Stock Incentive Plans—Under the 2016 Stock Incentive Plan, the Company has up to11.6 million securities remaining available for future issuance as of September 30, 2019. Stock options may be granted to employees and non-employee directors with an exercise price not less than the fair market value of the stock on the date of grant. Unexercised options expire seven years after date of grant.

During the three years in the period ended September 30, 2019, option activity was as follows:

	Number of Options (in millions)	Weighted Average Exercise Price
Balance, September 30, 2016	0.9	30.36
Granted	—	—
Exercised	(0.2)	26.42
Cancelled	—	—
Balance, September 30, 2017	0.7	31.11
Granted	—	—
Exercised	(0.1)	27.79
Cancelled	—	—
Balance, September 30, 2018	0.6	31.62
Granted	—	—
Exercised	—	—
Cancelled	(0.5)	(31.62)
Balance, September 30, 2019	0.1	31.62
Exercisable as of September 30, 2017	0.1	27.79
Exercisable as of September 30, 2018	—	N/A
Exercisable as of September 30, 2019	0.1	31.62

The aggregate intrinsic value of stock options exercised during the years ended September 30, 2018 and 2017 was $0.9 million and $1.2 million, respectively.

The fair value of the Company's employee stock option awards is estimated on the date of grant. The expected term of awards granted represents the period of time the awards are expected to be outstanding. The risk-free interest rate is based on U.S. Treasury bond rates with maturities equal to the expected term of the option on the grant date. The Company uses historical data as a basis to estimate the probability of forfeitures. No stock options were granted during the years ended September 30, 2019 and 2018.

The Company grants stock units to employees under its Performance Earnings Program (PEP), whereby units are earned and issued dependent upon meeting established cumulative performance objectives and vest over a three-year service period. Additionally, the Company issues restricted stock units to employees which are earned based on service conditions. The grant date fair value of PEP awards and restricted stock unit awards is that day's closing market price of the Company's common stock. The weighted average grant date fair value of PEP awards was $27.53, $37.69, and $38.15 during the years ended September 30, 2019, 2018 and 2017, respectively. The weighted average grant date fair value of restricted stock unit awards was $27.73, $36.83, and $37.96 during the years ended September 30, 2019, 2018 and 2017, respectively. Total compensation expense related to these share-based payments including stock options was $63.8 million, $73.1 million, and $83.8 million during the years ended September 30, 2019, 2018 and 2017, respectively. Unrecognized compensation expense related to total share-based payments outstanding as of September 30, 2019 and 2018 was $74.6 million and $94.3 million, respectively, to be recognized on a straight-line basis over the awards' respective vesting periods which are generally three years.

14. Income Taxes

Income (loss) before income taxes included (loss) income from domestic operations of $(255.6) million, $317.9 million, and $322.2 million for fiscal years ended September 30, 2019, 2018 and 2017 and income (loss) from foreign operations of $71.5 million, $(140.4) million, and $107.0 million for fiscal years ended September 30, 2019, 2018 and 2017.

Income tax (benefit) expense was comprised of:

	Fiscal Year Ended		
	September 30, 2019	September 30, 2018	September 30, 2017
	(in millions)		
Current:			
Federal	$ 9.2	$ (122.4)	$ 10.3
State	45.4	19.0	17.9
Foreign	43.2	47.1	29.3
Total current income tax expense (benefit)	97.8	(56.3)	57.5
Deferred:			
Federal	(67.0)	14.5	(8.3)
State	(41.7)	39.0	10.4
Foreign	10.8	(16.8)	(51.9)
Total deferred income tax (benefit) expense	(97.9)	36.7	(49.8)
Total income tax (benefit) expense	$ (0.1)	$ (19.6)	$ 7.7

The major elements contributing to the difference between the U.S. federal statutory rate of21% for fiscal year ended September 30, 2019 and 24.5% and 35% for fiscal years ended September 30, 2018 and 2017, respectively, and the effective tax rate are as follows:

	Fiscal Year Ended					
	September 30, 2019		September 30, 2018		September 30, 2017	
	Amount	%	Amount	%	Amount	%
	(in millions)					
Tax at federal statutory rate	$ (38.7)	21.0 %	$ 43.5	24.5 %	$ 150.3	35.0 %
State income tax, net of federal benefit	9.0	(4.9)	17.8	10.0	24.3	5.7
Impairment of goodwill, nondeductible for tax	82.7	(44.9)	33.9	19.1	—	—
Foreign residual income	28.9	(15.7)	10.3	5.8	(9.2)	(2.1)
Nondeductible costs	9.2	(5.0)	3.5	1.9	5.8	1.4
Change in uncertain tax positions	6.0	(3.3)	(31.4)	(17.7)	9.5	2.2
Return to provision, primarily foreign tax credits	3.7	(2.0)	(18.5)	(10.4)	—	—
Income tax credits and incentives	(47.6)	25.8	(37.2)	(21.0)	(56.8)	(13.2)
Valuation allowance	(20.3)	11.0	58.7	33.1	(51.2)	(11.9)
Exclusion of tax on non-controlling interests	(16.3)	8.9	(14.9)	(8.4)	(28.2)	(6.6)
Foreign tax rate differential	(4.8)	2.6	(1.6)	(0.9)	(19.2)	(4.5)
Audit settlement	(4.6)	2.5	(27.7)	(15.6)	—	—
Tax exempt income	(3.9)	2.1	(7.4)	(4.2)	(17.9)	(4.2)
Impact of changes in tax law	(1.5)	0.8	(47.8)	(26.9)	—	—
Other items, net	(1.9)	1.2	(0.8)	(0.4)	0.3	—
Total income tax expense (benefit)	$ (0.1)	0.1 %	$ (19.6)	(11.1)%	$ 7.7	1.8 %

During fiscal 2018, the Company recorded a valuation allowance of $38.1 million against foreign tax credits related to deferred tax assets in the U.S. In its determination of the realizability of its deferred tax assets, the Company evaluated positive evidence consisting of forecasts of foreign tax credit utilization against future foreign source income, earnings trends over a sustainable period, positive economic conditions in the industries the Company operates in, possible prudent and feasible tax planning strategies (net of costs to implement the tax planning strategies) and actual usage of foreign tax credit carryforwards. The Company also evaluated negative evidence consisting of significant foreign tax credits and U.S. tax law changes that restrict the usage of foreign tax credits. This evaluation was conducted on a tax jurisdictional basis or legal entity basis, as applicable, and based on the weighing of all positive and negative evidence, a determination was made as to the realizability of the deferred tax assets on that same basis. During fiscal 2019, the Company revaluated the valuation allowance based on positive evidence and negative evidence including new positive evidence related to the issuance of regulations during the first quarter related to *The Tax Cuts and Jobs Act* (Tax Act) and

forecasting the utilization of the foreign tax credits within the foreseeable future. Based on the weighing of all positive and negative evidence the Company determined that a valuation allowance was no longer needed and released the valuation allowance resulting in a tax benefit of $38.1 million.

During fiscal 2018, President Trump signed what is commonly referred to as *The Tax Cuts and Jobs Act* (the Tax Act) into law. The Tax Act reduced the Company's U.S. federal corporate tax rate from 35% to a blended tax rate of 24.5% for its fiscal year ending September 30, 2018 and 21% for fiscal years thereafter, required companies to pay a one-time transition tax on accumulated earnings of foreign subsidiaries, created new taxes on foreign sourced earnings and eliminated or reduced deductions.

During fiscal 2018, the Company recorded a $32.0 million provisional tax benefit related to the remeasurement of its U.S. deferred tax assets and liabilities based on the rates at which they are expected to reverse in the future, which is generally 21%. In addition, the Company released the deferred tax liability and recorded a tax benefit related to foreign subsidiaries for which the undistributed earnings are not intended to be reinvested indefinitely for $79.8 million and accrued $64 million of tax expense related to the one-time transition tax. During fiscal 2019, the Company completed the calculation of the total foreign earnings and profits of foreign subsidiaries and recorded a tax benefit of $1.5 million.

During fiscal 2018, the Company effectively settled a U.S. federal income tax examination for URS pre-acquisition tax years 2012, 2013 and 2014 and recorded a benefit of $27.7 million related to various adjustments, in addition to the favorable settlement for R&D credits of $26.2 million recorded in the second quarter of 2018. The Company is currently under tax audit in several jurisdictions including the U.S and believe the outcomes which are reasonably possible within the next twelve months, including lapses in statutes of limitations, could result in adjustments, but will not result in a material change in the liability for uncertain tax positions.

During fiscal 2018, the Company restructured certain operations in Canada which resulted in a release of a valuation allowance of $13.1 million. Certain operations in Canada continue to forecast losses and the valuation allowances could be reduced if the earnings trends reverse.

Generally, the Company would reverse its valuation allowance in a particular tax jurisdiction if the positive evidence examined, such as projected and sustainable earnings or a tax-planning strategy that allows for the usage of the deferred tax asset, is sufficient to overcome significant negative evidence, such as large net operating loss carryforwards or a cumulative history of losses in recent years. In the United States, the valued deferred tax assets have a restricted life or use under relevant tax law and, therefore, it is unlikely that the valuation allowance related to these assets will reverse. In addition, the Company is continually investigating tax planning strategies that, if prudent and feasible, may be implemented to realize a deferred tax asset that would otherwise expire unutilized. The identification and internal/external approval (as relevant) of such a prudent and feasible tax planning strategy could cause a reduction in the valuation allowance.

The deferred tax assets (liabilities) are as follows:

	Fiscal Year Ended	
	September 30, 2019	September 30, 2018
	(in millions)	
Deferred tax assets:		
Compensation and benefit accruals not currently deductible	$ 132.9	$ 108.3
Net operating loss carryforwards	228.2	252.4
Self-insurance reserves	12.9	13.5
Research and experimentation and other tax credits	120.5	178.1
Pension liability	105.1	88.2
Accrued liabilities	125.4	63.4
Other	28.8	27.8
Total deferred tax assets	753.8	731.7
Deferred tax liabilities:		
Unearned revenue	(106.9)	(121.1)
Depreciation and amortization	(78.5)	(135.9)
Acquired intangible assets	(49.6)	(56.0)
Investment in subsidiaries	(108.7)	(109.5)
Total deferred tax liabilities	(343.7)	(422.5)
Valuation allowance	(169.1)	(197.1)
Net deferred tax assets	$ 241.0	$ 112.1

As of September 30, 2019, the Company has available unused state and foreign net operating loss (NOL) carryforwards of $654.2 million and $945.8 million, respectively, which expire at various dates over the next several years; the federal NOL carryforwards and some foreign NOL carryforwards never expire. In addition, as of September 30, 2019, the Company has unused federal and state research and development credits of $77.6 million and $40.3 million, respectively, and California Enterprise Zone Tax Credits of $6.8 million which expire at various dates over the next several years.

As of September 30, 2019 and 2018, gross deferred tax assets were $753.8 million and $731.7 million, respectively. The Company has recorded a valuation allowance of $169.1 million and $197.1 million at September 30, 2019 and 2018, respectively, primarily related to foreign tax credits, state and foreign net operating loss carryforwards and credits and deferred tax assets related to certain pension obligations (primarily in the United Kingdom and Canada). The Company has performed an assessment of positive and negative evidence, including the nature, frequency, and severity of cumulative financial reporting losses in recent years, the future reversal of existing temporary differences, predictability of future taxable income exclusive of reversing temporary differences of the character necessary to realize the asset, relevant carryforward periods, taxable income in carry-back years if carry-back is permitted under tax law, and prudent and feasible tax planning strategies that would be implemented, if necessary, to protect against the loss of the deferred tax asset that would otherwise expire. Although realization is not assured, based on the Company's assessment, the Company has concluded that it is more likely than not that the remaining gross deferred tax asset (exclusive of deferred tax liabilities) of $584.7 million will be realized and, as such, no additional valuation allowance has been provided. The net decrease in the valuation allowance of $28.0 million is primarily attributable to the release of a valuation allowance of $38.1 million for foreign tax credits and the utilization of $6.0 million of foreign net operating loss carryforwards in the current year, partially offset by increases in valuation allowances for unbenefitable losses.

Generally, the Company does not provide for U.S. taxes or foreign withholding taxes on gross book-tax differences in its non-U.S. subsidiaries because such basis differences of approximately $1.8 billion are able to and intended to be reinvested indefinitely. If these basis differences were distributed, foreign tax credits could become available under current law to partially or fully reduce the resulting U.S. income tax liability. There may also be additional U.S. or foreign income tax liability upon repatriation, although the calculation of such additional taxes is not practicable.

As of September 30, 2019 and 2018, the Company had a liability for unrecognized tax benefits, including potential interest and penalties, net of related tax benefit, totaling $75.4 million and $71.9 million, respectively. The gross unrecognized tax benefits as of September 30, 2019 and 2018 were $62.4 million and $60.0 million, respectively, excluding interest, penalties, and related tax benefit. Of the $62.4 million, approximately $45.2 million would be included in the effective tax rate if recognized. A reconciliation of the beginning and ending amount of gross unrecognized tax benefits is as follows:

	Fiscal Year Ended	
	September 30, 2019	September 30, 2018
	(in millions)	
Balance at the beginning of the year	$ 60.0	$ 102.1
Gross increase in current period's tax positions	3.4	4.0
Gross increase in prior years' tax positions	0.8	2.2
Gross decrease in prior years' tax positions	(1.0)	(14.4)
Decrease due to settlement with tax authorities	—	(31.9)
Decrease due to lapse of statute of limitations	—	(1.7)
Gross change due to foreign exchange fluctuations	(0.8)	(0.3)
Balance at the end of the year	$ 62.4	$ 60.0

The Company classifies interest and penalties related to uncertain tax positions within the income tax expense line in the accompanying consolidated statements of operations. As of September 30, 2019, the accrued interest and penalties were $20.3 million and $4.3 million, respectively, excluding any related income tax benefits. At September 30, 2018, the accrued interest and penalties were $15.5 million and $4.1 million, respectively, excluding any related income tax benefits.

The Company files income tax returns in numerous tax jurisdictions, including the U.S., and numerous U.S. states and non-U.S. jurisdictions around the world. The statute of limitations varies by jurisdiction in which the Company operates. Because of the number of jurisdictions in which the Company files tax returns, in any given year the statute of limitations in certain jurisdictions may expire without examination within the 12-month period from the balance sheet date.

While it is reasonably possible that the total amounts of unrecognized tax benefits could significantly increase or decrease within the next twelve months, an estimate of the range of possible change cannot be made.

15. Earnings Per Share

Basic earnings per share (EPS) excludes dilution and is computed by dividing net income attributable to AECOM by the weighted average number of common shares outstanding for the period. Diluted EPS is computed by dividing net income attributable to AECOM by the weighted average number of common shares outstanding and potential common shares for the period. The Company includes as potential common shares the weighted average dilutive effects of equity awards using the treasury stock method. For the periods presented, equity awards excluded from the calculation of potential common shares were not significant. The computation of diluted loss per share for the year ended September 30, 2019 excludes 2.7 million of potential common shares due to their antidilutive effect.

The following table sets forth a reconciliation of the denominators of basic and diluted earnings per share:

	Fiscal Year Ended		
	September 30, 2019	September 30, 2018	September 30, 2017
	(in millions)		
Denominator for basic earnings per share	157.0	159.1	155.7
Potential common shares	—	3.2	3.4
Denominator for diluted earnings per share	157.0	162.3	159.1

16. Other Financial Information

Accrued expenses and other current liabilities consist of the following:

	Fiscal Year Ended	
	September 30, 2019	September 30, 2018
	(in millions)	
Accrued salaries and benefits	$ 1,020.7	$ 1,035.9
Accrued contract costs	913.9	861.0
Other accrued expenses	455.8	370.1
	$ 2,390.4	$ 2,267.0

Accrued contract costs above include balances related to professional liability accruals of $573.4 million and $519.5 million as of September 30, 2019 and 2018, respectively. The remaining accrued contract costs primarily relate to costs for services provided by subcontractors and other non-employees. Liabilities recorded related to accrued contract losses were not material as of September 30, 2019 and 2018. The Company did not have material revisions to estimates for contracts where revenue is recognized using the percentage-of-completion method during the twelve months ended September 30, 2019. In the first quarter of fiscal 2019, the Company commenced a restructuring plan to improve profitability. The Company incurred restructuring expenses of $95.4 million, including personnel and other costs of $73.3 million and real estate costs of $22.1 million during the year ended September 30, 2019, of which $26.5 million was accrued and unpaid at September 30, 2019. In connection with this restructuring plan, the Company evaluated its real estate portfolio to better align with the ongoing business. The Company identified certain long-lived assets that were no longer recoverable, and recorded an impairment of $27.4 million in Impairment of long-lived assets, including goodwill during the fourth quarter of fiscal 2019. Fair value of the long-lived assets was determined primarily using Level 3 inputs, such as discounted cash flows.

During the twelve months ended September 30, 2016, the Company recorded revenue related to the expected accelerated recovery of a pension related entitlement from the federal government of approximately $50 million. The entitlement resulted from pension costs that are reimbursable through certain government contracts in accordance with Cost Accounting Standards. The accelerated recognition resulted from an amendment to freeze pension benefits under URS Federal Services, Inc. Employees Retirement Plan. During the year ended September 30, 2019, the Company entered into an agreement with the federal government to settle substantially all of the entitlement.

17. Reclassifications out of Accumulated Other Comprehensive Loss

The accumulated balances and reporting period activities for the years ended September 30, 2019, 2018 and 2017 related to reclassifications out of accumulated other comprehensive loss are summarized as follows (in millions):

	Pension Related Adjustments	Foreign Currency Translation Adjustments	Gain on Derivative Instruments	Accumulated Other Comprehensive Loss
Balances at September 30, 2017	$ (281.9)	$ (418.4)	$ (0.4)	$ (700.7)
Other comprehensive income (loss) before reclassification	69.9	(83.8)	0.7	(13.2)
Amounts reclassified from accumulated other comprehensive loss	9.7	—	0.9	10.6
Balances at September 30, 2018	$ (202.3)	$ (502.2)	$ 1.2	$ (703.3)

	Pension Related Adjustments	Foreign Currency Translation Adjustments	Loss on Derivative Instruments	Accumulated Other Comprehensive Loss
Balances at September 30, 2018	$ (202.3)	$ (502.2)	$ 1.2	$ (703.3)
Other comprehensive income (loss) before reclassification	(107.2)	(46.5)	(17.2)	(170.9)
Amounts reclassified from accumulated other comprehensive loss	6.8	—	3.2	10.0
Balances at September 30, 2019	$ (302.7)	$ (548.7)	$ (12.8)	$ (864.2)

18. Commitments and Contingencies

The Company records amounts representing its probable estimated liabilities relating to claims, guarantees, litigation, audits and investigations. The Company relies in part on qualified actuaries to assist it in determining the level of reserves to establish for insurance-related claims that are known and have been asserted against it, and for insurance-related claims that are believed to have been incurred based on actuarial analysis, but have not yet been reported to the Company's claims administrators as of the respective balance sheet dates. The Company includes any adjustments to such insurance reserves in its consolidated results of operations. The Company's reasonably possible loss disclosures are presented on a gross basis prior to the consideration of insurance recoveries. The Company does not record gain contingencies until they are realized. In the ordinary course of business, the Company may not be aware that it or its affiliates are under investigation and may not be aware of whether or not a known investigation has been concluded.

In the ordinary course of business, the Company may enter into various arrangements providing financial or performance assurance to clients, lenders, or partners. Such arrangements include standby letters of credit, surety bonds, and corporate guarantees to support the creditworthiness or the project execution commitments of its affiliates, partnerships and joint ventures. Performance arrangements typically have various expiration dates ranging from the completion of the project contract and extending beyond contract completion in certain circumstances such as for warranties. The Company may also guarantee that a project, when complete, will achieve specified performance standards. If the project subsequently fails to meet guaranteed performance standards, the Company may incur additional costs, pay liquidated damages or be held responsible for the costs incurred by the client to achieve the required performance standards. The potential payment amount of an outstanding performance arrangement is typically the remaining cost of work to be performed by or on behalf of third parties. Generally, under joint venture arrangements, if a partner is financially unable to complete its share of the contract, the other partner(s) may be required to complete those activities.

At September 30, 2019, the Company was contingently liable in the amount of approximately $493.7 million in issued standby letters of credit and $4.8 billion in issued surety bonds primarily to support project execution.

In the ordinary course of business, the Company enters into various agreements providing financial or performance assurances to clients on behalf of certain unconsolidated partnerships, joint ventures and other jointly executed contracts. These agreements are entered into primarily to support the project execution commitments of these entities.

The Company's investment adviser jointly manages, sponsors and owns equity interest in the AECOM-Canyon Equity Fund, L.P. (the "Fund"), in which the Company has an ongoing capital commitment to fund investments. At September 30, 2019, the Company has capital commitments of $35 million to the Fund over the next 10 years.

In addition, in connection with the investment activities of AECOM Capital, the Company provides guarantees of certain obligations, including guarantees for completion of projects, repayment of debt, environmental indemnity obligations and other lender required guarantees.

Department of Energy Deactivation, Demolition, and Removal Project

Washington Group International, an Ohio company, the former name of one of the Company's wholly-owned subsidiaries (AECOM E&C) executed a cost-reimbursable task order with the Department of Energy (DOE) in 2007 to

provide deactivation, demolition and removal services at a New York State project site that, during 2010, experienced contamination and performance issues and remains uncompleted. In February 2011, AECOM E&C and the DOE executed a Task Order Modification that changed some cost-reimbursable contract provisions to at-risk. The Task Order Modification, including subsequent amendments, required the DOE to pay all project costs up to $106 million, required AECOM E&C and the DOE to equally share in all project costs incurred from $106 million to $146 million, and required AECOM E&C to pay all project costs exceeding $146 million.

Due to unanticipated requirements and permitting delays by federal and state agencies, as well as delays and related ground stabilization activities caused by Hurricane Irene in 2011, AECOM E&C has been required to perform work outside the scope of the Task Order Modification. In December 2014, AECOM E&C submitted claims against the DOE pursuant to the Contracts Disputes Acts seeking recovery of $103 million, including additional fees on changed work scope. AECOM E&C has incurred additional project costs outside the scope of the contract as a result of differing site and ground conditions and intends to submit additional formal claims against the DOE.

Due to significant delays and uncertainties about responsibilities for the scope of remaining work, final project completion costs and other associated costs have exceeded $100 million over the contracted and claimed amounts. AECOM E&C assets and liabilities, including the value of the above costs and claims, were measured at their fair value on October 17, 2014, the date the Company acquired AECOM E&C's parent company, which measurement has been reevaluated to account for developments pertaining to this matter. Deconstruction and decommissioning activities are completed and site restoration activities are completed. AECOM E&C increased its receivable during the quarter ended September 30, 2019. Such amount is included in the significant claims discussed in Note 4.

AECOM E&C can provide no certainty that it will recover the claims submitted against the DOE in December 2014, any future claims or any other project costs after December 2014 that AECOM E&C may be obligated to incur, which could have a material adverse effect on the Company's results of operations.

SR-91

One of the Company's wholly-owned subsidiaries, URS Corporation, a Nevada corporation, entered into a partial fixed cost and partial time and material design agreement in 2012 with a design build contractor for a state route highway construction project in Riverside County and Orange County, California. On April 1, 2017, URS Corporation filed an $ 8.2 million amended complaint in the Superior Court of California against the design build contractor for its failure to pay for services performed under the design agreement. On July 3, 2017, the design build contractor filed an amended cross-complaint against URS Corporation and the Company in Superior Court alleging breaches of contract, negligent interference and professional negligence pertaining to URS Corporation's performance of design services under the design agreement, seeking purported damages of $70 million. On May 4, 2018, the design build contractor dismissed its claims for negligent interference. On May 24, 2018, URS Corporation filed an $11.9 million second amended complaint in Superior Court against the design build contractor for its failure to pay for services performed under the design agreement. Jury trial commenced in Superior Court on July 1, 2019 and concluded on October 1, 2019. At the time of trial, URS was owed and claimed $4.9 million against the design build contractor, while the contractor counterclaimed for $103.7 million against URS Corporation and the Company. The jury issued a unanimous verdict awarding URS Corporation $4.9 million and awarding the design build contractor $2.7 million.

URS Corporation and AECOM cannot provide assurances that URS Corporation will be successful in the recovery of the amounts owed to it under the design agreement or in their defense against the amounts alleged under the cross-complaint that they believe are without merit and that they intend to continue to vigorously defend against in any further proceedings. The potential range of loss in excess of any current accrual cannot be reasonably estimated at this time primarily because the matter involves complex factual and legal issues; there is uncertainty regarding damages, including due to liability of and payments, by third parties; and the post-trial proceedings are ongoing.

New York Department of Environmental Conservation

The following separate matters pertain to government environmental allegations against one of the Company's wholly-owned subsidiaries, AECOM USA, Inc.

- In September 2017, AECOM USA, Inc. was advised by the New York State Department of Environmental Conservation (DEC) of allegations that it committed environmental permit violations pursuant to the New York Environmental Conservation Law (ECL) associated with AECOM USA, Inc.'s oversight of a stream restoration project for Schoharie County which could result in substantial penalties if calculated under the ECL's maximum civil penalty provisions. AECOM USA, Inc. disputes this claim and intends to continue to defend this matter vigorously; however, AECOM USA, Inc. cannot provide assurances that it will be successful in these efforts. The potential range of loss in excess of any current accrual cannot be reasonably estimated at this time primarily because the matter involves complex and unique environmental and regulatory issues; the project site involves the oversight and involvement of various local, state and federal government agencies; there is substantial uncertainty regarding any alleged damages; and the matter is in its preliminary stage of the government's claims and any negotiations of a consent order or other resolution.

- In December 2018, AECOM USA, Inc. was advised by DEC of allegations that, during AECOM USA, Inc.'s oversight of a remedial construction project in Poughkeepsie, New York, sheen escaped a containment boom line near the east bank of the Hudson River without proper notification to DEC and an unapproved dispersant was sprayed onto the Hudson River to control odors in violation of ECL. AECOM USA, Inc. denies these allegations but is working cooperatively with DEC to resolve the matter through a consent order.

Refinery Turnaround Project

AECOM E&C entered into an agreement to perform turnaround maintenance services during a planned shutdown at a refinery in Montana in December 2017. The turnaround project was completed in February 2019. Due to circumstances outside of AECOM E&C's control, including client directed changes and delays and the refinery's condition, AECOM E&C performed additional work outside of the original contract over $90 million. In March 2019, the refinery owner sent a letter to AECOM E&C alleging it incurred approximately $79 million in damages due to AECOM E&C's project performance. In April 2019, AECOM E&C filed and perfected a $132 million construction lien against the refinery owner for unpaid labor and materials costs. In August 2019, following a subcontractor complaint filed in the Thirteen Judicial District Court of Montana asserting claims against the refinery owner and AECOM E&C, the refinery owner crossclaimed against AECOM E&C and the subcontractor. In October 2019, following the subcontractor's dismissal of its claims, AECOM E&C removed the matter to federal court and cross claimed against the refinery owner for approximately $144 million. The Company's receivable relating to this claim is included within the significant claims discussed in Note 4, Revenue Recognition, to the financial statements included in this report.

AECOM E&C intends to vigorously prosecute and defend this matter; however, AECOM E&C cannot provide assurance that it will be successful in these efforts. The resolution of this matter and any potential range of loss cannot be reasonably determined or estimated at this time, primarily because the matter raises complex legal issues that AECOM E&C is continuing to assess.

19. Reportable Segments and Geographic Information

The Company's operations are organized into four reportable segments: Design and Consulting Services (DCS), Construction Services (CS), Management Services (MS), and AECOM Capital (ACAP). During the third quarter of fiscal 2017, operating activities of ACAP achieved a level of significance sufficient to warrant disclosure as a separate reportable segment. Prior to the third quarter of fiscal 2017, ACAP's operating results were included in the corporate segment, and comparable periods were reclassified to reflect the change. The Company's DCS reportable segment delivers planning, consulting, architectural, and engineering design services, program management and construction management for industrial, commercial, institutional and government clients worldwide. The Company's CS reportable segment provides construction, program and construction management services, including building construction and energy, infrastructure and industrial construction, primarily in the Americas. The Company's MS reportable segment provides program and

facilities management, environmental management, training, logistics, consulting, systems engineering and technical assistance, and systems integration and information technology, primarily for agencies of the U.S. government. The Company's ACAP segment primarily invests in and develops real estate projects. These reportable segments are organized by the types of services provided, the differing specialized needs of the respective clients, and how the Company manages its business. The Company has aggregated various operating segments into its reportable segments based on their similar characteristics, including similar long term financial performance, the nature of services provided, internal processes for delivering those services, and types of customers.

The following tables set forth summarized financial information concerning the Company's reportable segments:

Reportable Segments:	Design and Consulting Services	Construction Services	Management Services	AECOM Capital	Corporate	Total
			(in millions)			
Fiscal Year Ended September 30, 2019:						
Revenue	$ 8,268.2	$ 7,778.8	$ 4,118.1	$ 8.2	$ —	$ 20,173.3
Gross profit	545.9	55.4	203.9	8.2	—	813.4
Equity in earnings of joint ventures	18.0	36.5	8.8	17.7	—	81.0
General and administrative expenses	—	—	—	(4.9)	(143.2)	(148.1)
Restructuring costs	—	—	—	—	(95.4)	(95.4)
Gain (loss) on disposal activities	3.6	(7.4)	(6.6)	—	—	(10.4)
Impairment of long-lived assets, including goodwill	(15.2)	(590.5)	—	—	(9.7)	(615.4)
Operating income (loss)	552.3	(506.0)	206.1	21.0	(248.3)	25.1
Segment assets	7,136.3	3,804.0	2,648.7	197.8	674.8	14,461.6
Gross profit as a % of revenue	6.6 %	0.7 %	5.0 %			4.0 %
Fiscal Year Ended September 30, 2018:						
Revenue	$ 8,223.1	$ 8,238.9	$ 3,693.5	$ —	$ —	$ 20,155.5
Gross profit	439.2	40.4	171.0	—	—	650.6
Equity in earnings of joint ventures	15.8	21.5	28.6	15.2	—	81.1
General and administrative expenses	—	—	—	(11.2)	(124.5)	(135.7)
Loss on disposal activities	—	(2.9)	—	—	—	(2.9)
Impairment of assets held for sale, including goodwill	—	(168.2)	—	—	—	(168.2)
Operating income (loss)	455.0	(109.2)	199.6	4.0	(124.5)	424.9
Segment assets	7,013.8	4,212.0	2,701.2	140.6	613.5	14,681.1
Gross profit as a % of revenue	5.3 %	0.5 %	4.6 %			3.2 %
Fiscal Year Ended September 30, 2017:						
Revenue	$ 7,566.8	$ 7,295.6	$ 3,341.0	$ —	$ —	$ 18,203.4
Gross profit	394.8	92.9	196.0	—	—	683.7
Equity in earnings of joint ventures	16.4	22.4	45.1	57.7	—	141.6
General and administrative expenses	—	—	—	(8.7)	(124.7)	(133.4)
Gain on disposal activities	0.6	—	—	—	—	0.6
Acquisition and integration expenses	—	—	—	—	(38.7)	(38.7)
Operating income	411.8	115.3	241.1	49.0	(163.4)	653.8
Segment assets	6,992.6	4,114.5	2,704.6	199.1	386.2	14,397.0
Gross profit as a % of revenue	5.2 %	1.3 %	5.9 %			3.8 %

Geographic Information:

Long-Lived Assets	Fiscal Year Ended September 30, 2019	September 30, 2018	September 30, 2017
	(in millions)		
Americas	4,473.1	5,357.8	5,379.4
Europe, Middle East, Africa	1,797.2	1,759.5	1,781.1
Asia Pacific	412.5	369.2	382.9
Total	6,682.8	7,486.5	7,543.4

Long-lived assets consist of noncurrent assets excluding deferred tax assets.

20. Major Clients

Other than the U.S. federal government, no single client accounted for 10% or more of the Company's revenue in any of the past five fiscal years. Approximately 26%, 23%, and 22% of the Company's revenue was derived through direct contracts with agencies of the U.S. federal government in the years ended September 30, 2019, 2018 and 2017, respectively. One of these contracts accounted for approximately 3%, 2%, and 3% of the Company's revenue in the years ended September 30, 2019, 2018 and 2017, respectively.

21. Quarterly Financial Information—Unaudited

In the opinion of management, the following unaudited quarterly data reflects all adjustments necessary for a fair statement of the results of operations. All such adjustments are of a normal recurring nature.

Fiscal Year 2019:	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
	(in millions, except per share data)			
Revenue	$ 5,037.5	$ 5,040.0	$ 4,980.2	$ 5,115.6
Cost of revenue	4,866.9	4,844.6	4,771.0	4,877.4
Gross profit	170.6	195.4	209.2	238.2
Equity in earnings of joint ventures	12.5	25.9	28.6	14.0
General and administrative expenses	(35.9)	(37.4)	(37.5)	(37.3)
Restructuring costs	(63.3)	(15.9)	—	(16.2)
Loss on disposal activities	—	—	(7.4)	(3.0)
Impairment of long-lived assets, including goodwill	—	—	—	(615.4)
Income (loss) from operations	83.9	168.0	192.9	(419.7)
Other income	3.6	4.3	4.8	4.1
Interest expense	(56.0)	(57.9)	(55.7)	(56.4)
Income (loss) before income tax (benefit) expense	31.5	114.4	142.0	(472.0)
Income tax (benefit) expense	(33.6)	20.9	36.6	(24.0)
Net income (loss)	65.1	93.5	105.4	(448.0)
Noncontrolling interest in income of consolidated subsidiaries, net of tax	(13.6)	(15.6)	(21.7)	(26.2)
Net income (loss) attributable to AECOM	$ 51.5	$ 77.9	$ 83.7	$ (474.2)
Net income (loss) attributable to AECOM per share:				
Basic	$ 0.33	$ 0.50	$ 0.53	$ (3.01)
Diluted	$ 0.32	$ 0.49	$ 0.52	$ (3.01)
Weighted average common shares outstanding:				
Basic	156.4	156.6	157.4	157.7
Diluted	159.6	158.4	159.8	157.7

Fiscal Year 2018:	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
	(in millions, except per share data)			
Revenue	$ 4,910.8	$ 4,790.9	$ 5,148.0	$ 5,305.8
Cost of revenue	4,774.6	4,649.7	4,962.8	5,117.8
Gross profit	136.2	141.2	185.2	188.0
Equity in earnings of joint ventures	29.7	13.1	12.8	25.5
General and administrative expenses	(34.7)	(30.2)	(35.1)	(35.7)
Loss on disposal activities	—	—	(2.1)	(0.8)
Impairment of assets held for sale, including goodwill	—	(168.2)	—	—
Income (loss) from operations	131.2	(44.1)	160.8	177.0
Other income	2.3	12.5	2.7	2.6
Interest expense	(56.2)	(100.5)	(55.3)	(55.5)
Income (loss) before income tax (benefit) expense	77.3	(132.1)	108.2	124.1
Income tax (benefit) expense	(47.1)	(24.4)	33.1	18.7
Net income (loss)	124.4	(107.7)	75.1	105.4
Noncontrolling interest in income of consolidated subsidiaries, net of tax	(13.1)	(12.0)	(14.2)	(21.4)
Net income (loss) attributable to AECOM	$ 111.3	(119.7)	$ 60.9	$ 84.0
Net income (loss) attributable to AECOM per share:				
Basic	$ 0.70	$ (0.75)	$ 0.38	$ 0.53
Diluted	$ 0.69	$ (0.75)	$ 0.37	$ 0.52
Weighted average common shares outstanding:				
Basic	157.9	159.5	160.4	158.6
Diluted	161.8	159.5	163.2	161.8

22. Condensed Consolidating Financial Information

In connection with the registration of the Company's 2014 Senior Notes that were declared effective by the SEC on September 29, 2015, AECOM became subject to the requirements of Rule 3-10 of Regulation S-X regarding financial statements of guarantors and issuers of guaranteed securities. Both the 2014 Senior Notes and the 2017 Senior Notes are fully and unconditionally guaranteed on a joint and several basis by certain of AECOM's directly and indirectly 100% owned subsidiaries (the Subsidiary Guarantors). Other than customary restrictions imposed by applicable statutes, there are no restrictions on the ability of the Subsidiary Guarantors to transfer funds to AECOM in the form of cash dividends, loans or advances.

The following condensed consolidating financial information, which is presented for AECOM, the Subsidiary Guarantors on a combined basis and AECOM's non-guarantor subsidiaries on a combined basis, is provided to satisfy the disclosure requirements of Rule 3-10 of Regulation S-X.

Condensed Consolidating Balance Sheets
(in millions)
September 30, 2019

	Parent	Guarantor Subsidiaries	Non-Guarantor Subsidiaries	Eliminations	Total
ASSETS					
CURRENT ASSETS:					
Total cash and cash equivalents	$ 129.3	$ 315.6	$ 635.5	$ —	$ 1,080.4
Accounts receivable and contract assets—net	—	2,651.8	3,125.9	—	5,777.7
Intercompany receivable	1,164.7	163.9	176.0	(1,504.6)	—
Prepaid expenses and other current assets	52.5	270.1	304.8	—	627.4
Income taxes receivable	13.7	—	35.4	—	49.1
TOTAL CURRENT ASSETS	1,360.2	3,401.4	4,277.6	(1,504.6)	7,534.6
PROPERTY AND EQUIPMENT—NET	193.0	179.1	187.3	—	559.4
DEFERRED TAX ASSETS—NET	152.8	45.6	142.1	(95.2)	245.3
INVESTMENTS IN CONSOLIDATED SUBSIDIARIES	5,740.8	1,611.2	—	(7,352.0)	—
INVESTMENTS IN UNCONSOLIDATED JOINT VENTURES	9.9	41.6	353.7	—	405.2
GOODWILL	—	3,193.4	2,081.9	—	5,275.3
INTANGIBLE ASSETS—NET	—	172.3	60.7	—	233.0
OTHER NON-CURRENT ASSETS	33.1	43.5	132.2	—	208.8
TOTAL ASSETS	$ 7,489.8	$ 8,688.1	$ 7,235.5	$ (8,951.8)	$ 14,461.6
LIABILITIES AND STOCKHOLDERS' EQUITY					
CURRENT LIABILITIES:					
Short-term debt	$ 21.8	$ —	$ 26.0	$ —	$ 47.8
Accounts payable	50.2	1,946.1	958.4	—	2,954.7
Accrued expenses and other current liabilities	108.0	1,012.1	1,270.3	—	2,390.4
Income taxes payable	23.6	—	36.0	—	59.6
Intercompany payable	116.1	873.9	649.5	(1,639.5)	—
Contract liabilities	—	318.8	621.1	—	939.9
Current portion of long-term debt	12.6	14.8	42.0	—	69.4
TOTAL CURRENT LIABILITIES	332.3	4,165.7	3,603.3	(1,639.5)	6,461.8
OTHER LONG-TERM LIABILITIES	130.7	288.2	391.4	—	810.3
DEFERRED TAX LIABILITY—NET	—	—	99.5	(95.2)	4.3
NOTE PAYABLE INTERCOMPANY—NON CURRENT	872.6	—	467.5	(1,340.1)	—
LONG-TERM DEBT	2,468.9	290.1	526.8	—	3,285.8
TOTAL LIABILITIES	3,804.5	4,744.0	5,088.5	(3,074.8)	10,562.2
TOTAL AECOM STOCKHOLDERS' EQUITY	3,685.3	3,944.1	1,938.2	(5,877.0)	3,690.6
Noncontrolling interests	—	—	208.8	—	208.8
TOTAL STOCKHOLDERS' EQUITY	3,685.3	3,944.1	2,147.0	(5,877.0)	3,899.4
TOTAL LIABILITIES AND STOCKHOLDERS' EQUITY	$ 7,489.8	$ 8,688.1	$ 7,235.5	$ (8,951.8)	$ 14,461.6

Condensed Consolidating Balance Sheets
(in millions)
September 30, 2018

	Parent	Guarantor Subsidiaries	Non-Guarantor Subsidiaries	Eliminations	Total
ASSETS					
CURRENT ASSETS:					
Total cash and cash equivalents	$ 22.0	$ 270.9	$ 593.8	$ —	$ 886.7
Accounts receivable and contract assets—net	—	2,544.7	2,924.1	—	5,468.8
Intercompany receivable	951.1	84.9	157.9	(1,193.9)	—
Prepaid expenses and other current assets	52.9	331.6	200.7	—	585.2
Current assets held for sale	—	—	59.8	—	59.8
Income taxes receivable	84.6	—	42.2	—	126.8
TOTAL CURRENT ASSETS	1,110.6	3,232.1	3,978.5	(1,193.9)	7,127.3
PROPERTY AND EQUIPMENT—NET	202.6	217.3	194.2	—	614.1
DEFERRED TAX ASSETS—NET	134.0	—	150.0	(124.6)	159.4
INVESTMENTS IN CONSOLIDATED SUBSIDIARIES	6,364.1	1,912.0	—	(8,276.1)	—
INVESTMENTS IN UNCONSOLIDATED JOINT VENTURES	13.4	49.6	247.7	—	310.7
GOODWILL	—	3,392.7	2,528.4	—	5,921.1
INTANGIBLE ASSETS—NET	—	218.6	101.3	—	319.9
OTHER NON-CURRENT ASSETS	49.9	45.6	133.1	—	228.6
TOTAL ASSETS	$ 7,874.6	$ 9,067.9	$ 7,333.2	$ (9,594.6)	$ 14,681.1
LIABILITIES AND STOCKHOLDERS' EQUITY					
CURRENT LIABILITIES:					
Short-term debt	$ 8.4	$ —	$ —	$ —	$ 8.4
Accounts payable	53.6	1,616.7	1,055.7	—	2,726.0
Accrued expenses and other current liabilities	58.8	1,035.6	1,172.7	—	2,267.1
Income taxes payable	10.4	—	29.4	—	39.8
Intercompany payable	105.5	830.8	416.9	(1,353.2)	—
Contract liabilities	1.5	316.1	613.8	—	931.4
Current liabilities held for sale	—	—	22.3	—	22.3
Current portion of long-term debt	43.3	27.0	64.4	—	134.7
TOTAL CURRENT LIABILITIES	281.5	3,826.2	3,375.2	(1,353.2)	6,129.7
OTHER LONG-TERM LIABILITIES	131.6	249.0	361.5	—	742.1
DEFERRED TAX LIABILITY—NET	—	63.1	108.9	(124.7)	47.3
NOTE PAYABLE INTERCOMPANY—NON CURRENT	800.9	—	487.5	(1,288.4)	—
LONG-TERM DEBT	2,627.8	291.4	564.5	—	3,483.7
TOTAL LIABILITIES	3,841.8	4,429.7	4,897.6	(2,766.3)	10,402.8
TOTAL AECOM STOCKHOLDERS' EQUITY	4,032.8	4,638.2	2,250.1	(6,828.3)	4,092.8
Noncontrolling interests	—	—	185.5	—	185.5
TOTAL STOCKHOLDERS' EQUITY	4,032.8	4,638.2	2,435.6	(6,828.3)	4,278.3
TOTAL LIABILITIES AND STOCKHOLDERS' EQUITY	$ 7,874.6	$ 9,067.9	$ 7,333.2	$ (9,594.6)	$ 14,681.1

Condensed Consolidating Statements of Operations
(in millions)

	For the Fiscal Year Ended September 30, 2019				
	Parent	Guarantor Subsidiaries	Non-Guarantor Subsidiaries	Eliminations	Total
Revenue	$ —	$ 10,978.7	$ 9,282.4	$ (87.8)	$ 20,173.3
Cost of revenue	—	10,594.7	8,853.0	(87.8)	19,359.9
Gross profit	—	384.0	429.4	—	813.4
Equity in earnings from subsidiaries	82.0	(54.4)	—	(27.6)	—
Equity in earnings of joint ventures	—	3.6	77.4	—	81.0
General and administrative expenses	(143.3)	—	(4.8)	—	(148.1)
Restructuring costs	(95.4)	—	—	—	(95.4)
Loss on disposal activities	(6.6)	—	(3.8)	—	(10.4)
Impairment of long-lived assets, including goodwill	(9.6)	(200.2)	(405.6)	—	(615.4)
(Loss) income from operations	(172.9)	133.0	92.6	(27.6)	25.1
Other income	5.0	48.4	20.4	(57.0)	16.8
Interest expense	(202.8)	(22.0)	(58.2)	57.0	(226.0)
(Loss) income before income tax (benefit) expense	(370.7)	159.4	54.8	(27.6)	(184.1)
Income tax (benefit) expense	(109.6)	92.1	17.4	—	(0.1)
Net (loss) income	(261.1)	67.3	37.4	(27.6)	(184.0)
Noncontrolling interests in income of consolidated subsidiaries, net of tax	—	—	(77.1)	—	(77.1)
Net (loss) income attributable to AECOM	$ (261.1)	$ 67.3	$ (39.7)	$ (27.6)	$ (261.1)

	For the Fiscal Year Ended September 30, 2018				
	Parent	Guarantor Subsidiaries	Non-Guarantor Subsidiaries	Eliminations	Total
Revenue	$ —	$ 11,052.9	$ 9,212.9	$ (110.3)	$ 20,155.5
Cost of revenue	—	10,757.2	8,858.0	(110.3)	19,504.9
Gross profit	—	295.7	354.9	—	650.6
Equity in earnings from subsidiaries	460.9	207.2	—	(668.1)	—
Equity in earnings of joint ventures	—	37.2	43.9	—	81.1
General and administrative expenses	(124.4)	—	(11.3)	—	(135.7)
Impairment on assets held for sale, including goodwill	—	—	(168.2)	—	(168.2)
Loss on disposal activities	—	—	(2.9)	—	(2.9)
Income from operations	336.5	540.1	216.4	(668.1)	424.9
Other income	12.0	34.5	12.7	(39.1)	20.1
Interest expense	(242.9)	(25.1)	(38.6)	39.1	(267.5)
Income before income tax (benefit) expense	105.6	549.5	190.5	(668.1)	177.5
Income tax (benefit) expense	(31.1)	98.8	(87.4)	—	(19.7)
Net income	136.7	450.7	277.9	(668.1)	197.2
Noncontrolling interests in income of consolidated subsidiaries, net of tax	—	—	(60.7)	—	(60.7)
Net income attributable to AECOM	$ 136.7	$ 450.7	$ 217.2	$ (668.1)	$ 136.5

Condensed Consolidating Statements of Operations
(in millions)

	For the Fiscal Year Ended September 30, 2017				
	Parent	Guarantor Subsidiaries	Non-Guarantor Subsidiaries	Eliminations	Total
Revenue	$ —	$ 10,491.6	$ 7,764.1	$ (52.3)	$ 18,203.4
Cost of revenue	—	10,136.1	7,435.9	(52.3)	17,519.7
Gross profit	—	355.5	328.2	—	683.7
Equity in earnings from subsidiaries	439.3	222.4	—	(661.7)	—
Equity in earnings of joint ventures	—	43.8	97.8	—	141.6
General and administrative expenses	(124.7)	—	(8.7)	—	(133.4)
Acquisition and integration expenses	(38.7)	—	—	—	(38.7)
Gain on disposal activities	—	—	0.6	—	0.6
Income from operations	275.9	621.7	417.9	(661.7)	653.8
Other income	2.1	31.9	9.2	(36.5)	6.7
Interest expense	(203.7)	(31.1)	(33.0)	36.5	(231.3)
Income before income tax (benefit) expense	74.3	622.5	394.1	(661.7)	429.2
Income tax (benefit) expense	(264.9)	182.5	58.4	31.7	7.7
Net income	339.2	440.0	335.7	(693.4)	421.5
Noncontrolling interests in income of consolidated subsidiaries, net of tax	—	—	(82.1)	—	(82.1)
Net income attributable to AECOM	$ 339.2	$ 440.0	$ 253.6	$ (693.4)	$ 339.4

Consolidating Statements of Comprehensive Income (Loss)
(in millions)

	For the Fiscal Year Ended September 30, 2019				
	Parent	Guarantor Subsidiaries	Non-Guarantor Subsidiaries	Eliminations	Total
Net (loss) income	$ (261.1)	$ 67.3	$ 37.4	$ (27.6)	$ (184.0)
Other comprehensive loss, net of tax:					
Net unrealized loss on derivatives, net of tax	(7.4)	—	(6.6)	—	(14.0)
Foreign currency translation adjustments	—	—	(46.6)	—	(46.6)
Pension adjustments, net of tax	(15.8)	(41.2)	(43.4)	—	(100.4)
Other comprehensive loss, net of tax	(23.2)	(41.2)	(96.6)	—	(161.0)
Comprehensive (loss) income, net of tax	(284.3)	26.1	(59.2)	(27.6)	(345.0)
Noncontrolling interests in comprehensive income of consolidated subsidiaries, net of tax	—	—	(76.9)	—	(76.9)
Comprehensive (loss) income attributable to AECOM, net of tax	$ (284.3)	$ 26.1	$ (136.1)	$ (27.6)	$ (421.9)

	For the Fiscal Year Ended September 30, 2018				
	Parent	Guarantor Subsidiaries	Non-Guarantor Subsidiaries	Eliminations	Total
Net income	$ 136.7	$ 450.7	$ 277.9	$ (668.1)	$ 197.2
Other comprehensive income (loss), net of tax:					
Net unrealized gain (loss) on derivatives, net of tax	2.3	—	(0.6)	—	1.7
Foreign currency translation adjustments	—	—	(82.7)	—	(82.7)
Pension adjustments, net of tax	5.0	10.8	63.7	—	79.5
Other comprehensive income (loss), net of tax	7.3	10.8	(19.6)	—	(1.5)
Comprehensive income, net of tax	144.0	461.5	258.3	(668.1)	195.7
Noncontrolling interests in comprehensive income of consolidated subsidiaries, net of tax	—	—	(61.9)	—	(61.9)
Comprehensive income attributable to AECOM, net of tax	$ 144.0	$ 461.5	$ 196.4	$ (668.1)	$ 133.8

	For the Fiscal Year Ended September 30, 2017				
	Parent	Guarantor Subsidiaries	Non-Guarantor Subsidiaries	Eliminations	Total
Net income	$ 339.2	$ 440.0	$ 335.7	$ (693.4)	$ 421.5
Other comprehensive income (loss), net of tax:					
Net unrealized gain (loss) on derivatives, net of tax	4.9	—	(0.3)	—	4.6
Foreign currency translation adjustments	—	—	65.4	—	65.4
Pension adjustments, net of tax	7.1	13.8	66.1	—	87.0
Other comprehensive income, net of tax	12.0	13.8	131.2	—	157.0
Comprehensive income, net of tax	351.2	453.8	466.9	(693.4)	578.5
Noncontrolling interests in comprehensive income of consolidated subsidiaries, net of tax	—	—	(82.2)	—	(82.2)
Comprehensive income attributable to AECOM, net of tax	$ 351.2	$ 453.8	$ 384.7	$ (693.4)	$ 496.3

Condensed Consolidating Statements of Cash Flows
(in millions)

	For the Fiscal Year Ended September 30, 2019				
	Parent	Guarantor Subsidiaries	Non-Guarantor Subsidiaries	Eliminations	Total
CASH FLOWS FROM OPERATING ACTIVITIES	$ (16.7)	$ 572.7	$ 221.6	$ —	$ 777.6
CASH FLOWS FROM INVESTING ACTIVITIES:					
Proceeds from disposal of business, net of cash disposed	11.7	(3.0)	37.8	—	46.5
Net investment in unconsolidated joint ventures	(4.2)	(25.8)	(89.0)	—	(119.0)
Net proceeds from sale of investment securities	—	—	9.1	—	9.1
Payments for capital expenditures, net of disposals	(32.9)	(24.3)	(26.2)	—	(83.4)
Net receipts from (investment in) intercompany notes	54.9	(52.4)	(29.7)	27.2	—
Other intercompany investing activities	291.9	211.0	—	(502.9)	—
Net cash provided by (used in) investing activities	321.4	105.5	(98.0)	(475.7)	(146.8)
CASH FLOWS FROM FINANCING ACTIVITIES:					
Proceeds from borrowings under credit agreements	7,524.0	—	176.8	—	7,700.8
Repayments of borrowings under credit agreements	(7,734.1)	(28.6)	(221.9)	—	(7,984.6)
Proceeds from issuance of common stock	30.4	—	—	—	30.4
Payments to repurchase common stock	(98.2)	—	—	—	(98.2)
Net distributions to noncontrolling interests	—	—	(70.0)	—	(70.0)
Other financing activities	4.8	(0.8)	(15.7)	—	(11.7)
Net borrowings (repayments) on intercompany notes	75.7	26.4	(74.9)	(27.2)	—
Other intercompany financing activities	—	(630.5)	127.6	502.9	—
Net cash used in financing activities	(197.4)	(633.5)	(78.1)	475.7	(433.3)
EFFECT OF EXCHANGE RATE CHANGES ON CASH	—	—	(3.8)	—	(3.8)
NET INCREASE IN CASH AND CASH EQUIVALENTS	107.3	44.7	41.7	—	193.7
CASH AND CASH EQUIVALENTS AT BEGINNING OF YEAR	22.0	270.9	593.8	—	886.7
CASH AND CASH EQUIVALENTS AT END OF YEAR	$ 129.3	$ 315.6	$ 635.5	$ —	$ 1,080.4

	For the Fiscal Year Ended September 30, 2018				
	Parent	Guarantor Subsidiaries	Non-Guarantor Subsidiaries	Eliminations	Total
CASH FLOWS FROM OPERATING ACTIVITIES	$ (205.5)	$ 640.9	$ 339.1	$ —	$ 774.5
CASH FLOWS FROM INVESTING ACTIVITIES:					
Proceeds from purchase price adjustment to business acquisition	—	—	2.2	—	2.2
Cash acquired from consolidation of joint venture	—	—	7.6	—	7.6
Proceeds from disposal of business, net of cash disposed	—	—	19.5	—	19.5
Net investment in unconsolidated joint ventures	(6.1)	(9.1)	30.0	—	14.8
Net purchases of investments	—	—	(16.3)	—	(16.3)
Payments for capital expenditures, net of disposals	(29.3)	(39.1)	(18.5)	—	(86.9)
Net investment in intercompany notes	(54.3)	(778.8)	(5.6)	838.7	—
Other intercompany investing activities	528.2	1,022.1	—	(1,550.3)	—
Net cash provided by investing activities	438.5	195.1	18.9	(711.6)	(59.1)
CASH FLOWS FROM FINANCING ACTIVITIES:					
Proceeds from borrowings under credit agreements	7,770.4	0.2	758.4	—	8,529.0
Repayments of borrowings under credit agreements	(7,820.0)	(18.0)	(202.2)	—	(8,040.2)
Redemption of unsecured senior notes	(800.0)	—	—	—	(800.0)
Prepayment penalty on unsecured senior notes	(34.5)	—	—	—	(34.5)
Cash paid for debt issuance costs	(12.2)	—	—	—	(12.2)
Proceeds from issuance of common stock	35.2	—	—	—	35.2
Proceeds from exercise of stock options	2.8	—	—	—	2.8
Payments to repurchase common stock	(179.5)	—	—	—	(179.5)
Net distributions to noncontrolling interests	—	—	(89.8)	—	(89.8)
Other financing activities	(3.6)	(22.4)	(9.7)	—	(35.7)
Net borrowings on intercompany notes	797.8	5.9	35.0	(838.7)	—
Other intercompany financing activities	—	(785.7)	(764.6)	1,550.3	—
Net cash used in financing activities	(243.6)	(820.0)	(272.9)	711.6	(624.9)
EFFECT OF EXCHANGE RATE CHANGES ON CASH	—	—	(6.2)	—	(6.2)
NET (DECREASE) INCREASE IN CASH AND CASH EQUIVALENTS	(10.6)	16.0	78.9	—	84.3
CASH AND CASH EQUIVALENTS AT BEGINNING OF YEAR	32.6	254.9	514.9	—	802.4
CASH AND CASH EQUIVALENTS AT END OF YEAR	$ 22.0	$ 270.9	$ 593.8	$ —	$ 886.7

Condensed Consolidating Statements of Cash Flows
(in millions)

	For the Fiscal Year Ended September 30, 2017				
	Parent	Guarantor Subsidiaries	Non-Guarantor Subsidiaries	Eliminations	Total
CASH FLOWS FROM OPERATING ACTIVITIES	$ (5.9)	$ 695.0	$ 7.6	$ —	$ 696.7
CASH FLOWS FROM INVESTING ACTIVITIES:					
Payments for business acquisitions, net of cash acquired	—	—	(103.1)	—	(103.1)
Proceeds from disposal of business, net of cash disposed	—	—	2.2	—	2.2
Net investment in unconsolidated joint ventures	—	(2.7)	(21.6)	—	(24.3)
Net purchases of investments	—	—	0.9	—	0.9
Payments for capital expenditures, net of disposals	(21.7)	(30.6)	(26.1)	—	(78.4)
Net (investment in) receipts from intercompany notes	(4.6)	102.8	12.2	(110.4)	—
Other intercompany investing activities	139.0	(233.2)	—	94.2	—
Net cash provided by (used in) investing activities	112.7	(163.7)	(135.5)	(16.2)	(202.7)
CASH FLOWS FROM FINANCING ACTIVITIES:					
Proceeds from borrowings under credit agreements	5,903.5	13.1	36.6	—	5,953.2
Repayments of borrowings under credit agreements	(6,956.3)	(51.1)	(64.2)	—	(7,071.6)
Issuance of unsecured senior notes	1,000.0	—	—	—	1,000.0
Redemption of unsecured senior notes	—	(179.2)	—	—	(179.2)
Cash paid for debt and equity issuance costs	(13.0)	—	—	—	(13.0)
Proceeds from issuance of common stock	30.1	—	—	—	30.1
Proceeds from exercise of stock options	4.9	—	—	—	4.9
Payments to repurchase common stock	(25.1)	—	—	—	(25.1)
Net distributions to noncontrolling interests	—	—	(59.0)	—	(59.0)
Other financing activities	(24.1)	(38.3)	35.6	—	(26.8)
Net borrowings (repayments) on intercompany notes	4.0	(16.3)	(98.1)	110.4	—
Other intercompany financing activities	—	(200.9)	295.1	(94.2)	—
Net cash provided by (used in) financing activities	(76.0)	(472.7)	146.0	16.2	(386.5)
EFFECT OF EXCHANGE RATE CHANGES ON CASH	—	—	2.8	—	2.8
NET INCREASE IN CASH AND CASH EQUIVALENTS	30.8	58.6	20.9	—	110.3
CASH AND CASH EQUIVALENTS AT BEGINNING OF YEAR	1.8	196.3	494.0	—	692.1
CASH AND CASH EQUIVALENTS AT END OF YEAR	$ 32.6	$ 254.9	$ 514.9	$ —	$ 802.4

23. Subsequent Events

On October 12, 2019, the Company entered into a purchase and sale agreement (the Purchase Agreement) with Maverick Purchaser Sub, LLC, an affiliate of American Securities LLC and Lindsay Goldberg LLC. Upon the terms and subject to the conditions set forth in the Purchase Agreement, the Company has agreed to transfer the assets and liabilities constituting its Management Services business to the Purchaser for a purchase price of $2.405 billion, subject to customary cash, debt and working capital adjustments. The Purchase Agreement was unanimously approved by the Board of Directors of the Company.

The purchase price includes contingent consideration of approximately $150 million attributable to certain claims related to prior work and engagements.

The consummation of the transaction is subject to regulatory approvals and other customary closing conditions, and is expected to occur in the first half of fiscal 2020.

AECOM Technology Corporation

Schedule II: Valuation and Qualifying Accounts

(amounts in millions)

	Balance at Beginning of Year	Additions Charged to Cost of Revenue	Deductions[a]	Other and Foreign Exchange Impact	Balance at the End of the Year
Allowance for Doubtful Accounts					
Fiscal Year 2019	$ 51.6	$ 26.6	$ (21.5)	$ (0.6)	$ 56.1
Fiscal Year 2018	$ 52.2	$ 18.3	$ (17.5)	$ (1.4)	$ 51.6
Fiscal Year 2017	$ 60.4	$ 13.1	$ (20.7)	$ (0.6)	$ 52.2

(a) Primarily relates to accounts written-off and recoveries

ITEM 9. CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURE

None.

ITEM 9A. CONTROLS AND PROCEDURES

Evaluation of Disclosure Controls and Procedures

Based on management's evaluation, with the participation of our Chief Executive Officer (CEO) and Chief Financial Officer (CFO), our CEO and CFO have concluded that our disclosure controls and procedures as defined in Rules 13a-15(e) and 15(d)-15(e) under the Securities Exchange Act of 1934, as amended (Exchange Act), were effective as of September 30, 2019 to ensure that information required to be disclosed by us in this Annual Report on Form 10-K or submitted under the Exchange Act is (i) recorded, processed, summarized and reported within the time periods specified in the Securities and Exchange Commission rules and forms, and (ii) accumulated and communicated to our management, including our principal executive and principal financial officer, as appropriate, to allow timely decisions regarding required disclosures.

Management's Report on Internal Control over Financial Reporting

Our management is responsible for establishing and maintaining adequate internal control over financial reporting. Internal control over financial reporting is defined in Rule 13a-15(f) or 15d-15(f) promulgated under the Securities Exchange Act of 1934, as amended, as a process designed by, or under the supervision of, the company's principal executive and principal financial officers and effected by the company's board of directors, management and other personnel, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. Internal control over financial reporting includes those policies and procedures that (i) pertain to the maintenance of records that in reasonable detail accurately and fairly reflect the transactions and dispositions of the assets of the company; (ii) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (iii) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Projections of any evaluation of the effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

Our management, with the participation of our CEO and CFO, assessed the effectiveness of our internal control over financial reporting as of September 30, 2019, the end of our fiscal year. Our management based its assessment on criteria established in *Internal Control—Integrated Framework* (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission. Our management's assessment included evaluation and testing of the design and operating effectiveness of key financial reporting controls, process documentation, accounting policies, and our overall control environment.

Based on our management's assessment, our management has concluded that our internal control over financial reporting was effective as of September 30, 2019. Our management communicated the results of its assessment to the Audit Committee of our Board of Directors.

Our independent registered public accounting firm, Ernst & Young LLP, audited our financial statements for the fiscal year ended September 30, 2019 included in this Annual Report on Form 10-K, and has issued an audit report with respect to the effectiveness of the Company's internal control over financial reporting, a copy of which is included earlier in this Annual Report on Form 10-K.

Changes in Internal Control Over Financial Reporting

There were no changes in our internal control over financial reporting during the fiscal quarter ended September 30, 2019 identified in connection with the evaluation required by paragraph (d) of Rules 13a-15 and 15d-15 under the Exchange Act that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

ITEM 9B. OTHER INFORMATION

The Company expects to incur restructuring costs of $130 million to $160 million in fiscal year 2020 primarily related to costs associated with the sale of the Management Services business and expected exit of at-risk, self-perform construction. Total cash costs for the restructuring are expected to be between $160 and $180 million, including capital expenditures associated with real estate restructuring of approximately $40 million.

PART III

ITEM 10. DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE

Incorporated by reference from our definitive proxy statement for the 2020 Annual Meeting of Stockholders, to be filed within 120 days of our fiscal 2019 year end.

ITEM 11. EXECUTIVE COMPENSATION

Incorporated by reference from our definitive proxy statement for the 2020 Annual Meeting of Stockholders, to be filed within 120 days of our fiscal 2019 year end.

ITEM 12. SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT AND RELATED STOCKHOLDERS MATTERS

Other than with respect to the information relating to our equity compensation plans, which is incorporated herein by reference to Part II, Item 5, “Equity Compensation Plans” of this Form 10-K, the information required by this item is incorporated by reference from our definitive proxy statement for the 2020 Annual Meeting of Stockholders, to be filed within 120 days of our fiscal 2019 year end.

ITEM 13. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS, AND DIRECTOR INDEPENDENCE

Incorporated by reference from our definitive proxy statement for the 2020 Annual Meeting of Stockholders, to be filed within 120 days of our fiscal 2019 year end.

ITEM 14. PRINCIPAL ACCOUNTANT FEES AND SERVICES

Incorporated by reference from our definitive proxy statement for the 2020 Annual Meeting of Stockholders, to be filed within 120 days of our fiscal 2019 year end.

PART IV

ITEM 15. EXHIBITS AND FINANCIAL STATEMENT SCHEDULES

(a) Documents filed as part of this report:

(1) The company's Consolidated Financial Statements at September 30, 2019 and 2018 and for each of the three years in the period ended September 30, 2019 and the notes thereto, together with the report of the independent auditors on those Consolidated Financial Statements are hereby filed as part of this report.

(2) Financial Statement Schedule II—Valuation and Qualifying Accounts for the Years Ended September 30, 2019, 2018 and 2017.

(3) See Exhibits and Index to Exhibits, below.

(b) Exhibits.

Exhibit Number	Exhibit Description	Form	Incorporated by Reference (Exchange Act Filings Located at File No. 0-52423) Exhibit	Filing Date	Filed Herewith
2.1	Purchase and Sale Agreement, dated as of October 12, 2019, by and between AECOM and Maverick Purchaser Sub, LLC	8-K	2.1	10/17/2019	
3.1	Amended and Restated Certificate of Incorporation of AECOM Technology Corporation.	10-K	3.1	11/21/2011	
3.2	Certificate of Amendment to Amended and Restated Certificate of Incorporation of AECOM Technology Corporation.	S-4	3.2	8/1/2014	
3.3	Certificate of Correction of Amended and Restated Certificate of Incorporation of AECOM Technology Corporation.	10-K	3.3	11/17/2014	
3.4	Certificate of Amendment to the Company's Certificate of Incorporation.	8-K	3.1	1/9/2015	
3.5	Certificate of Amendment to the Company's Certificate of Incorporation.	8-K	3.1	3/3/2017	
3.6	Amended and Restated Bylaws.	8-K	3.2	11/15/2018	
3.7	Certificate of Designations for Class C Preferred Stock.	Form 10	3.2	1/29/2007	
3.8	Certificate of Designations for Class E Preferred Stock.	Form 10	3.3	1/29/2007	
3.9	Certificate of Designations for Class F Convertible Preferred Stock.	Form 10	3.4	1/29/2007	
3.10	Certificate of Designations for Class G Convertible Preferred Stock.	Form 10	3.5	1/29/2007	
4.1	Form of Common Stock Certificate.	Form 10	4.1	1/29/2007	
4.2	Indenture, dated as of October 6, 2014, by and among AECOM Technology Corporation, the Guarantors party thereto, and U.S. Bank National Association, as trustee.	8-K	4.1	10/8/2014	

Exhibit Number	Exhibit Description	Form	Incorporated by Reference (Exchange Act Filings Located at File No. 0-52423) Exhibit	Filing Date	Filed Herewith
4.3	First Supplemental Indenture, dated as of October 17, 2014, by and among AECOM Technology Corporation, the guarantors party thereto and U.S. Bank National Association.	10-K	4.10	11/17/2014	
4.4	Second Supplemental Indenture, dated as of June 3, 2015, by and among AECOM, the guarantors party thereto and U.S. Bank National Association.	S-4	4.3	7/6/2015	
4.5	Third Supplemental Indenture, dated as of June 19, 2015, by and among AECOM, the guarantor party thereto and U.S. Bank National Association.	S-4	4.4	7/6/2015	
4.6	Fourth Supplemental Indenture, dated as of March 13, 2018, by and among AECOM, the guarantors party thereto and U.S. Bank National Association.	8-K	10.2	3/14/2018	
4.7†	Indenture, dated March 15, 2012, between URS Corporation, URS Fox U.S. LP and U.S. Bank National Association.	8-K	4.01	3/20/2012	
4.8†	First Supplemental Indenture, dated March 15, 2012, by and among URS Corporation, URS Fox U.S. LP, the additional guarantor parties thereto and U.S. Bank National Association.	8-K	4.02	3/20/2012	
4.9†	Second Supplemental Indenture, dated March 15, 2012, by and among URS Corporation, URS Fox U.S. LP, the additional guarantor parties thereto and U.S. Bank National Association.	8-K	4.03	3/20/2012	
4.10†	Third Supplemental Indenture, dated as of May 14, 2012, by and among URS Corporation, URS Fox U.S. LP, the additional guarantor parties thereto and U.S. Bank National Association.	8-K	4.6	5/18/2012	
4.11†	Fourth Supplemental Indenture, dated as of September 24, 2012, by and among URS Corporation, URS Fox U.S. LP, the additional guarantor parties thereto and U.S. Bank National Association.	8-K	4.2	9/26/2012	
4.12	Fifth Supplemental Indenture, dated as of October 17, 2014, by and among AECOM Global II, LLC, URS Fox U.S. LP and U.S. Bank National Association.	10-K	4.8	11/17/2014	
4.13	Indenture, dated as of February 21, 2017, by and among AECOM, the Guarantors party thereto and U.S. Bank, National Association, as trustee.	8-K	4.1	2/21/2017	
4.14	First Supplemental Indenture, dated as of March 13, 2018, by and among AECOM, the guarantors party thereto and U.S. Bank National Association.	8-K	10.3	3/14/2018	

Exhibit Number	Exhibit Description	Form	Incorporated by Reference (Exchange Act Filings Located at File No. 0-52423) Exhibit	Filing Date	Filed Herewith
4.15	Credit Agreement, dated as of October 17, 2014, among AECOM Technology Corporation and certain of its subsidiaries, as borrowers, certain lenders, Bank of America, N.A., as Administrative Agent, Swing Line Lender and L/C Issuer, MUFG Union Bank, N.A., BNP Paribas, JPMorgan Chase Bank, N.A., and the Bank of Nova Scotia, as Co-Syndication Agents, and BBVA Compass, Credit Agricole Corporate and Investment Bank, HSBC Bank USA, National Association, Sumitomo Mitsui Banking Corporation and Wells Fargo Bank, National Association, as Co-Documentation Agents.	8-K	10.1	10/17/2014	
4.16	Amendment No. 1 to the Credit Agreement, dated as of July 1, 2015, by and among AECOM and certain of its subsidiaries, as borrowers, certain lenders, Bank of America, N.A., as Administrative Agent, Swing Line Lender and L/C Issuer.	8-K	10.1	7/7/2015	
4.17	Amendment No. 2 to Credit Agreement, dated as of December 22, 2015, among the Company, the Lenders party thereto, and Bank of America, N.A., as Administrative Agent, Swing Line Lender, and an L/C Issuer.	8-K	10.1	12/22/2015	
4.18	Amendment No. 3 to Credit Agreement and Amendment No. 1 to the Security Agreement, dated as of September 29, 2016, among the Company, the Lenders party thereto, and Bank of America, N.A., as Administrative Agent, Swing Line Lender, and an L/C Issuer.	8-K	10.1	9/30/2016	
4.19	Amendment No. 4 to Credit Agreement dated as of March 31, 2017, among the Company, the Lenders party thereto, and Bank of America, N.A., as Administrative Agent, Swing Line Lender, and an L/C Issuer.	8-K	10.1	4/6/2017	
4.20	Amendment No. 5 to Credit Agreement dated as of March 13, 2018, among AECOM, the Lenders party thereto, and Bank of America, N.A., as Administrative Agent, Swing Line Lender, and an L/C Issuer.	8-K	10.1	3/14/2018	
4.21	Amendment No. 6 to Credit Agreement, dated as of November 12, 2018, among AECOM, the Lenders party thereto, and Bank of America, N.A., as Administrative Agent, Swing Line Lender, and an L.C. Issuer	10-K	4.21	11/13/2018	
4.22	Description of Registrant's Securities				X
10.1#	AECOM Technology Corporation Change in Control Severance Policy for Key Executives	10-Q	10.1	2/7/2018	
10.2#	Employment Agreement between AECOM Technology Corporation and Randall A. Wotring, dated as of January 1, 2015.	10-Q	10.2	2/11/2015	
10.3#	Amended and Restated 2006 Stock Incentive Plan.	Schedule 14A	Annex B	1/21/2011	

Exhibit Number	Exhibit Description	Form	Incorporated by Reference (Exchange Act Filings Located at File No. 0-52423) Exhibit	Filing Date	Filed Herewith
10.4#	Form of Stock Option Standard Terms and Conditions under 2006 Stock Incentive Plan.	8-K	10.1	12/5/2008	
10.5#	Form of Restricted Stock Unit Standard Terms and Conditions under 2006 Stock Incentive Plan.	8-K	10.2	12/21/2012	
10.6#	Standard Terms and Conditions for Performance Earnings Program under AECOM Technology Corporation 2006 Stock Incentive Plan.	8-K	10.3	12/5/2008	
10.7#	AECOM Amended & Restated 2016 Stock Incentive Plan.	Schedule 14A	Annex B	1/19/2017	
10.8#	Form Standard Terms and Conditions for Restricted Stock Units for Non-Employee Directors under the 2016 Stock Incentive.	10-Q	10.3	5/11/2016	
10.9#	Form Standard Terms and Conditions for Restricted Stock Units under the 2016 Stock Incentive Plan.	10-Q	10.4	5/11/2016	
10.10#	Form Standard Terms and Conditions for Performance Earnings Program under the 2016 Stock Incentive Plan.	10-Q	10.5	5/11/2016	
10.11#	Form Standard Terms and Conditions for Non-Qualified Stock Options under the 2016 Stock Incentive Plan.	10-Q	10.6	5/11/2016	
10.12#	Standard Terms and Conditions for Performance Earnings Program and Performance Criteria.	8-K	10.1	12/15/2016	
10.13#	AECOM Technology Corporation Executive Deferred Compensation Plan.	8-K	10.1	12/21/2012	
10.14#	First Amendment to the AECOM Executive Deferred Compensation Plan.	10-Q	10.3	2/10/2016	
10.15#	AECOM Technology Corporation Executive Incentive Plan.	Schedule 14A	Annex A	1/22/2010	
10.16#	Letter Agreement, dated as of March 6, 2014, by and among AECOM Technology Corporation and Michael S. Burke.	8-K	10.1	3/12/2014	
10.17#	Letter Agreement, dated as of May 8, 2018 between AECOM and Michael S. Burke.	10-Q	10.1	5/9/2018	
10.18#	Form of Special LTI Award Stock Option Terms and Conditions under the 2006 Stock Incentive Plan.	8-K	10.2	3/12/2014	
10.19#	AECOM Retirement & Savings Plan (amended and restated effective July 1, 2016).	10-Q	10.1	8/10/2016	
10.20#	AECOM Amended and Restated Employee Stock Purchase Plan.	DEF 14A	Annex A	1/23/2019	
10.21#	Change in Control Severance Agreement, dated as of August 23, 2019, by and between AECOM Management Services Inc. and John Vollmer.	8-K	10.1	8/23/2019	
10.22#	Retention and Completion Bonus Award Agreement, effective as of August 23, 2019, by and between AECOM and John Vollmer.	8-K	10.2	8/23/2019	
10.23#	Form Standard Terms and Conditions for Performance Earnings Program under the 2016 Stock Incentive Plan (Fiscal Year 2019)	10-Q	10.1	2/6/2019	
21.1	Subsidiaries of AECOM.				X

Exhibit Number	Exhibit Description	Form	Incorporated by Reference (Exchange Act Filings Located at File No. 0-52423) Exhibit	Filing Date	Filed Herewith
23.1	Consent of Independent Registered Public Accounting Firm.				X
31.1	Certification of the Company's Chief Executive Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.				X
31.2	Certification of the Company's Chief Financial Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.				X
32*	Certification of the Company's Chief Executive Officer and Chief Financial Officer pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.				X
95	Mine Safety Disclosure.				X
101	The following financial statements from the Company's Quarterly Report on Form 10-Q for the quarter ended June 30, 2019 were formatted in iXBRL (Inline eXtensible Business Reporting Language): (i) Consolidated Balance Sheets, (ii) Consolidated Statements of Operations, (iii) Consolidated Statements of Comprehensive Income (Loss), (iv) Consolidated Statements of Stockholders' Equity, (v) Condensed Consolidated Statements of Cash Flows, and (vi) the Notes to Condensed Consolidated Financial Statements, tagged as blocks of text and including detailed tags.				X
104	The cover page from the Company's Quarterly Report on Form 10-Q for the quarter ended June 30, 2019, formatted in Inline XBRL.				X

Management contract or compensatory plan or arrangement.

* Document has been furnished and not filed.

† Indicates a material agreement previously filed by URS Corporation, a public company acquired by AECOM on October 17, 2014.

ITEM 16. FORM 10-K SUMMARY

None.

SIGNATURE

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the Registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

AECOM

By: /s/ W. TROY RUDD
W. Troy Rudd
Executive Vice President and Chief Financial Officer
(Principal Financial Officer)
Date: November 13, 2019

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of the Registrant in the capacities and on the date indicated.

Signature	Title	Date
/s/ MICHAEL S. BURKE Michael S. Burke	Chairman and Chief Executive Officer (Principal Executive Officer)	November 13, 2019
/s/ W. TROY RUDD W. Troy Rudd	Executive Vice President and Chief Financial Officer (Principal Financial Officer)	November 13, 2019
/s/ GAURAV KAPOOR Gaurav Kapoor	Senior Vice President, Global Controller (Principal Accounting Officer)	November 13, 2019
/s/ JAMES H. FORDYCE James H. Fordyce	Director	November 13, 2019
/s/ SENATOR WILLIAM H. FRIST, M.D. Senator William H. Frist, M.D.	Director	November 13, 2019
/s/ LINDA GRIEGO Linda Griego	Director	November 13, 2019
/S/ STEVEN A. KANDARIAN Steven A. Kandarian	Director	November 13, 2019
/s/ ROBERT J. ROUTS Robert J. Routs	Director	November 13, 2019
/s/ CLARENCE T. SCHMITZ Clarence T. Schmitz	Director	November 13, 2019
/s/ DOUGLAS W. STOTLAR Douglas W. Stotlar	Director	November 13, 2019
/s/ DANIEL R. TISHMAN Daniel R. Tishman	Director	November 13, 2019
/s/ GEN. JANET C. WOLFENBARGER, USAF RET. Gen. Janet C. Wolfenbarger, USAF Ret.	Director	November 13, 2019

Exhibit 4.22

DESCRIPTION OF THE REGISTRANT'S SECURITIES REGISTERED PURSUANT TO SECTION 12 OF THE SECURITIES EXCHANGE ACT OF 1934

As of September 30, 2019, AECOM (the "Company," "we," "us" or "our") has one class of securities registered under Section 12 of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), our common stock, par value $0.01 per share ("Common Stock").

The summary of the general terms and provisions of the Common Stock set forth below does not purport to be complete and is subject to and qualified by reference to the Company's Amended and Restated Certificate of Incorporation, as amended by the Certificates of Amendment thereto (as amended, the "Certificate"), and Amended and Restated Bylaws ("Bylaws"), each of which is incorporated by reference as exhibits to the Annual Report on Form 10-K. For additional information, please read the Certificate and Bylaws and the applicable provisions of the General Corporation Law of Delaware (the "DGCL").

Description of Common Stock

General. The Certificate authorizes us to issue 300,000,000 shares of Common Stock. Subject to the rights pertaining to any series of preferred stock, in the event of our liquidation, holders of our Common Stock are entitled to share ratably in our assets legally available for distribution after the payment of our debts. The shares of Common Stock have no preemptive, subscription, conversion or redemption rights. Subject to the rights of the holders of preferred stock, the holders of the Common Stock are entitled to receive dividends, when, as and if declared by our Board of Directors (the "Board"), from funds legally available for such dividend payments.

Delaware Law. We are subject to the provisions of Section 203 of the DGCL. In general, Section 203 prohibits a publicly held

Delaware corporation from engaging in a "business combination" with an "interested stockholder" for a period of three years after the date on which the person becomes an interested stockholder, unless (i) prior to the time that such stockholder becomes an interested stockholder, the Board of Directors approves such transaction or business combination, (ii) the stockholder acquires more than 85% of the outstanding voting stock of the corporation (excluding shares held by directors who are officers or held in employee stock plans) upon consummation of such transaction, or (iii) at or subsequent to the time such stockholder becomes an interested stockholder, the business combination is approved by the Board of Directors and by two-thirds of the outstanding voting stock of the corporation (excluding shares held by the interested stockholder) at a meeting of stockholders (and not by written consent). A "business combination" includes a merger, asset sale or other transaction resulting in a financial benefit to such interested stockholder. For purposes of Section 203, "interested stockholder" is a person who, together with affiliates and associates, owns (or within three years prior, did own) 15% or more of the corporation's voting stock.

Certificate of Incorporation and Bylaws. Various provisions of our Certificate and Bylaws, which are summarized in the following paragraphs, may be deemed to have an anti-takeover effect and may delay, defer or prevent a tender offer or takeover attempt that a stockholder might consider in its best interest, including those attempts that might result in a premium over the market price for the shares held by stockholders.

No Cumulative Voting. The DGCL provides that stockholders are denied the right to cumulate votes in the election of directors unless our Certificate provides otherwise. Our Certificate does not expressly address cumulative voting.

*No Stockholder Action by Written Consent; Calling of Special Meetings of Stockholders.*Our Certificate prohibits stockholder action by written consent. Our Bylaws also provide that special meetings of our stockholders (i) may be called at any time by the Board or by a committee of the Board which has been duly designated by the Board and whose powers and authority, as expressly provided in a resolution of the Board, include the power to call such meetings, and (ii) must be called by the Chairman of the Board or the Secretary of the Company upon the request of one or more persons that own at least 25% of the outstanding shares of the Company that are entitled to

vote on the matter(s) to be brought before the proposed special meeting as of the record date fixed in accordance with the Bylaws, provided the requesting stockholder(s) satisfy the requirements specified in the Bylaws.

Voting Rights. A majority of the outstanding shares entitled to vote on a matter, represented in person or by proxy, constitutes a quorum at any meeting of stockholders except as otherwise provided by applicable law or by the Certificate. Prior to the Company's 2020 annual meeting of stockholders, at any meeting of stockholders for the election of directors, when a quorum is present, a plurality of the votes of the shares of the Company present in person or represented by proxy at the meeting and entitled to vote on the election of directors at such meeting of stockholders is sufficient to elect directors. Commencing with the Company's 2020 annual meeting of stockholders, at any meeting of stockholders for the election of directors, including the 2020 annual meeting, each director will be elected by a majority of the votes cast; provided that, if the election is contested, the directors will be elected by a plurality of the votes cast. In all other matters, when a quorum is present at any meeting, the affirmative vote of the holders of a majority of the shares of capital stock present in person or represented by proxy at the meeting and entitled to vote on the subject matter at such meeting of stockholders shall decide any question brought before such meeting, unless the question is one upon which by express provision of applicable law or of the Certificate or the Bylaws, a different vote is required, in which case such express provision shall govern and control the decision of such matter.

Unless otherwise provided in the Certificate, each stockholder entitled to vote at any meeting of the stockholders shall be entitled to one vote (in person or by proxy) for each share held by such stockholder which has voting power upon the matter in question.

Proxy Access Provision of Our Bylaws. The Bylaws permit a stockholder, or a group of up to 20 stockholders, owning 3% or more of the Company's outstanding common stock continuously for at least three years to nominate and include in the Company's proxy materials director nominees not to exceed the greater of (i) 20% of the Board or (ii) two directors, provided that the stockholder(s) and the nominee(s) satisfy the procedural and eligibility requirements specified in the Bylaws.

Advance Notice Requirements for Stockholder Proposals and Director Nominations. Our Bylaws provide that stockholders seeking to bring business before an annual meeting of stockholders must provide timely notice of their proposal in writing to the corporate secretary. To be timely, a stockholder's notice must be delivered or mailed and received at our principal executive offices not less than 90 nor more than 120 days prior to the first anniversary of the preceding year's annual meeting of stockholders. Our Bylaws also specify requirements as to the form and content of a stockholder's notice. These provisions may impede stockholders' ability to bring matters before an annual meeting of stockholders or make nominations for directors at an annual meeting of stockholders.

Annual Election of Directors. We do not have a classified board of directors. The full Board is subject to re-election at each annual meeting of our stockholders.

Limitations on Liability and Indemnification of Officers and Directors. The DGCL authorizes corporations to limit or eliminate the personal liability of directors to corporations and their stockholders for monetary damages for breaches of directors' fiduciary duties. Our Certificate includes a provision that eliminates the personal liability of directors for monetary damages for actions taken as a director, except for liability:

- for breach of duty of loyalty;
- for acts or omissions not in good faith or involving intentional misconduct or knowing violation of law;
- under Section 174 of the DGCL (unlawful dividends); or
- for transactions from which the director derived improper personal benefit.

Our Bylaws provide that we must indemnify our directors and officers to the fullest extent authorized by the DGCL. We are also expressly authorized to carry directors' and officers' insurance providing indemnification for our directors, officers and certain employees for some liabilities. We believe that these indemnification provisions and insurance are useful to attract and retain qualified directors and officers.

The limitation of liability and indemnification provisions in our Certificate and Bylaws may discourage stockholders from bringing a lawsuit against directors for breach of their fiduciary duty. These provisions may also have the effect of reducing the likelihood of derivative litigation against directors and officers, even though such an action, if successful, might otherwise benefit us and our stockholders.

Authorized But Unissued Shares. Subject to the requirements of any stock exchange on which shares of our Common Stock may be listed, our authorized but unissued shares of Common Stock will be available for future issuance without the approval of holders of Common Stock. We may use these additional shares for a variety of corporate purposes, including future offerings to raise additional capital, corporate acquisitions and employee benefit plans.

Listing. The Common Stock is traded on the New York Stock Exchange under the trading symbol "ACM."

EXHIBIT 21.1

AECOM Global, Inc., a Delaware Corporation
AECOM, C&E, Inc., a Delaware Corporation
AECOM Technical Services, Inc., a California Corporation
AECOM USA, Inc., a New York Corporation
AECOM Asia Company Limited*
AECOM Government Services, Inc., a Delaware Corporation
AECOM Canada Ltd*
AECOM South Africa Group Holdings Pty Ltd
AECOM Design Build Ltd*
AECOM Global Ireland Services Limited*
AECOM Energy & Construction, Inc., an Ohio Corporation
AECOM Infrastructure & Environment UK Limited*
Flint Energy Services, Inc., a Delaware Corporation
Flint Field Services Ltd*
Hunt Construction Group Inc., an Indiana Corporation
Oscar Faber PLC*
URS Corporation, a Nevada Corporation
URS Group Inc. a Delaware Corporation
URS Federal Services, Inc., a Delaware Corporation
URS Luxembourg LLP*
URS Corporation—Ohio, an Ohio Corporation
URS Global Holdings Inc., a Nevada Corporation
AECOM Intercontinental Holdings UK Limited*
URS E&C UK Limited*
Sellafield Limited*
Tishman Construction Corporation, a Delaware Corporation
Tishman Construction Corporation of New York, a Delaware Corporation

* Foreign

EXHIBIT 23.1

Consent of Independent Registered Public Accounting Firm

We consent to the incorporation by reference in the following Registration Statements (Form S-8 Nos. 333-167047, 333-142070, 333-199453, 333-208964, 333-209890, 333-216442 and 333-230214) pertaining to various stock incentive, purchase and retirement plans of AECOM of our reports dated November 13, 2019, with respect to the consolidated financial statements and schedule of AECOM and to the effectiveness of internal control over financial reporting of AECOM included in this Annual Report (Form 10-K) of AECOM for the year ended September 30, 2019.

/s/ ERNST & YOUNG LLP

Los Angeles, California
November 13, 2019

EXHIBIT 31.1

Certification Pursuant to
Rule 13a-14(a)/15d-14(a)

I, Michael S. Burke, certify that:

1. I have reviewed this Annual Report on Form 10-K of AECOM;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

   (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

   (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

   (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

   (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

   (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

   (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Dated: November 13, 2019

/s/ MICHAEL S. BURKE
Michael S. Burke

Chairman and Chief Executive Officer
(Principal Executive Officer)

EXHIBIT 31.2

Certification Pursuant to
Rule 13a-14(a)/15d-14(a)

I, W. Troy Rudd, certify that:

1. I have reviewed this Annual Report on Form 10-K of AECOM;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

(a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

(b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

(c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

(d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

(a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

(b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Dated: November 13, 2019

/s/ W. TROY RUDD
W. Troy Rudd
Executive Vice President and Chief Financial Officer
(Principal Financial Officer)

Exhibit 32

Certification Pursuant to
18 U.S.C. Section 1350

In connection with the Annual Report of AECOM (the "Company") on Form 10-K for the fiscal year ended September 30, 2019 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), we, Michael S. Burke, Chief Executive Officer of the Company, and W. Troy Rudd, Chief Financial Officer of the Company, hereby certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that, to our knowledge:

1. The Report fully complies with the requirements of Section 13(a) or Section 15(d) of the Securities Exchange Act of 1934, as amended; and

2. The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

/s/ MICHAEL S. BURKE
Michael S. Burke
Chairman and Chief Executive Officer
November 13, 2019

/s/ W. TROY RUDD
W. Troy Rudd
Executive Vice President and Chief Financial Officer
November 13, 2019

EXHIBIT 95

Section 1503 of the Dodd-Frank Wall Street Reform and Consumer Protection Act requires domestic mine operators to disclose violations and orders issued under the Federal Mine Safety and Health Act of 1977 (the Mine Act) by the federal Mine Safety and Health Administration (MSHA). We do not act as the owner of any mines but we may act as a mining operator as defined under the Mine Act where we may be a lessee of a mine, a person who operates, controls or supervises such mine, or as an independent contractor performing services or construction of such mine.

The following table provides information for the year ended September 30, 2019.

Mine(1)	Mine Act §104 Violations(2)	Mine Act §104(b) Orders(3)	Mine Act §104(d) Citations and Orders(4)	Mine Act §110(b)(2) Violations(5)	Mine Act §107(a) Orders(6)	Proposed Assessments from MSHA (In dollars ($))	Mining Related Fatalities	Mine Act §104(e) Notice (yes/no)(7)	Pending Legal Action before Federal Mine Safety and Health Review Commission (yes/no)(8)
Black Thunder Project	2	0	0	0	0	$ 0.00	0	No	No
Bayer Quantzite Quarry	0	0	0	0	0	$ 0.00	0	No	No

(1) United States mines.

(2) The total number of violations received from MSHA under §104 of the Mine Act, which includes citations for health or safety standards that could significantly and substantially contribute to a serious injury if left unabated.

(3) The total number of orders issued by MSHA under §104(b) of the Mine Act, which represents a failure to abate a citation under §104(a) within the period of time prescribed by MSHA.

(4) The total number of citations and orders issued by MSHA under §104(d) of the Mine Act for unwarrantable failure to comply with mandatory health or safety standards.

(5) The total number of flagrant violations issued by MSHA under §110(b)(2) of the Mine Act.

(6) The total number of orders issued by MSHA under §107(a) of the Mine Act for situations in which MSHA determined an imminent danger existed.

(7) A written notice from the MSHA regarding a pattern of violations, or a potential to have such pattern under §104(e) of the Mine Act.

(8) The following Pending Legal Action Table provides information for the year ended September 30, 2019.

Mine	Number Pending Legal Actions	Contests of Penalty Assessments	Legal Action Initiated in 2018	Legal Action Resolved in 2018
Black Thunder Project	0	0	0	0
Bayer Quantzite Quarry	0	0	0	0

List of AECOM USA, Inc. Affiliates

AECOM USA, Inc. (AUSA) is a direct, wholly owned subsidiary of AECOM Technical Services, Inc. and an indirect, wholly owned subsidiary of AECOM, a Delaware corporation whose stock is publicly traded on the New York Stock Exchange (ACM/NYSE). The following is a list, compiled after reasonable research and inquiry, of AUSA's domestic and foreign affiliates. The principal address for AUSA is 605 Third Avenue, New York, NY 10158. All other companies can receive mail there as well.

Domestic
AECOM C&E, Inc. (Delaware)
AECOM Infrastructure, Inc. (New York)
AECOM Services, Inc. (California)
CASS Water Engineering, Inc. (Delaware)
Davis Langdon, Inc. (California)
Economics Research Associates (California)
EDAW, Inc. (Delaware)
Earth Tech Environment & Infrastructure, Inc. (Wisconsin)
Earth Tech WE Holding, Inc. (Delaware)
The Hunt Corporation (Indiana)
Tishman Construction Corporation (Delaware)
URS Corporation (Nevada)

Foreign
Grupo Rust International di Venezuela C.A. (Venezuela)
AECOM INGENIERIA S.A. de C. V. (Mexico) (99% owned)
Shanghai Earth Tech Eng. Cons. Co Lid. (China) (48% owned)

List of AECOM USA, Inc.
Subsidiaries

AECOM USA, Inc. (AUSA) is a direct, wholly owned subsidiary of AECOM Technical Services, Inc. and an indirect, wholly owned subsidiary of AECOM, a Delaware corporation whose stock is publicly traded on the New York Stock Exchange (ACM/NYSE). The following is a list, compiled after reasonable research and inquiry, of AUSA's domestic and foreign subsidiaries. The principal address for AUSA is 605 Third Avenue, New York, NY 10158. All other companies can receive mail there as well.

Domestic

AECOM Architects & Engineers, Inc. (New Jersey)
AECOM Libya Housing and Infrastructure, Inc. (Delaware)
AECOM of Nevada, Inc. (Nevada)
AECOM Pacific, Inc. (Delaware)
AECOM USA of Massachusetts, Inc. (Massachusetts)
AECOM USA of Michigan, Inc. (Delaware)
ATC Architecture, Inc. (New York) (50% owned with AECOM Services, Inc.) Boyle Holding Corporation (California)
Consoer, Townsend & Associates, Inc. (Delaware)
Consoer Townsend Envirodyne Engineers of Indiana, Inc. (Delaware)
Consoer Townsend Envirodyne Engineers of Ohio, Inc. (Delaware)
DMJM Aviation, Inc. (Delaware)
DMJM, Inc. (Delaware)
Egis-Semaly, Inc. (New York)
Envirodyne Engineers, Inc. (Delaware)
Frederic R. Harris, Inc. (Delaware)
Lim & Nascimento Engineering Corporation (California)
Material Testing Services, Inc. (Illinois)
Metcalf & Eddy Management, P.C. (DC)
Metcalf & Eddy of New York, Inc. (New York)
Metcalf & Eddy of Ohio, Inc. (Ohio)
P&D Consultants, Inc. (Delaware)
Subsurface Exploration, Inc. (Illinois)
Subsurface Testing Services, Ltd. (Illinois)
The Ellerbe Becket Company, LLC (Delaware)
Urbitran Architectural/Engineering Group, Inc. (Connecticut) (66. 7% owned) Urbitran Architectural/Engineering Group, PLLC (New York) (70% owned)

Foreign

AECOM INGENIERIA S.A. de CV. (Mexico) (1% owned)
Oil-Harris, S.A. (Venezuela) (20% owned)
DMJM+HARRIS, Canada Inc. (Canada)
ESCY Consultants Limited (Cyprus)
Frederic R. Harris B.V. (Netherlands)
Frederic R. Harris, Ltd. (UK)
Holmes & Narver Canada, Inc. (Canada)
Maunsell Harris Consulting Engineers PVT.LTD (India)
Metcalf & Eddy de Panama, S. A. (Panama)
Planeacion de Recursos Cientificos S.A. de C.V. (Mexico)
Resources Engineering Consultants Company LTD (Thailand) (42% owned)

CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY) 10/27/2021

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must have ADDITIONAL INSURED provisions or be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER
Marsh Risk & Insurance Services
CA License #0437153
633 W. Fifth Street, Suite 1200
Los Angeles, CA 90071
Attn: LosAngeles.CertRequest@Marsh.Com
CN101348564-STND-GAUE-21-22 09 2025

CONTACT NAME: Marsh Risk & Insurance Services
PHONE (A/C, No, Ext): 213-346-5000 **FAX (A/C, No):**
E-MAIL ADDRESS: LosAngeles.CertRequest@marsh.com

INSURER(S) AFFORDING COVERAGE	NAIC #
INSURER A : ACE American Insurance Company	22667
INSURER B : N/A	N/A
INSURER C : Illinois Union Insurance Co	27960
INSURER D : SEE ACORD 101	
INSURER E :	
INSURER F :	

INSURED
AECOM
AECOM USA Inc.
200 Broadhollow Road, Suite 207
Melville, NY 11747

COVERAGES **CERTIFICATE NUMBER:** LOS-002564790-01 **REVISION NUMBER:**

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSD	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS	
A	X COMMERCIAL GENERAL LIABILITY	X		HDO G72486304	04/01/2021	04/01/2022	EACH OCCURRENCE	$ 1,000,000
	CLAIMS-MADE X OCCUR						DAMAGE TO RENTED PREMISES (Ea occurrence)	$ 1,000,000
							MED EXP (Any one person)	$ 5,000
							PERSONAL & ADV INJURY	$ 1,000,000
	GEN'L AGGREGATE LIMIT APPLIES PER:						GENERAL AGGREGATE	$ 2,000,000
	X POLICY PRO-JECT LOC						PRODUCTS - COMP/OP AGG	$ 2,000,000
	OTHER:							$
	AUTOMOBILE LIABILITY						COMBINED SINGLE LIMIT (Ea accident)	$
	ANY AUTO						BODILY INJURY (Per person)	$
	OWNED AUTOS ONLY / SCHEDULED AUTOS						BODILY INJURY (Per accident)	$
	HIRED AUTOS ONLY / NON-OWNED AUTOS ONLY						PROPERTY DAMAGE (Per accident)	$
								$
	UMBRELLA LIAB / OCCUR						EACH OCCURRENCE	$
	EXCESS LIAB / CLAIMS-MADE						AGGREGATE	$
	DED RETENTION $							$
D	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY			SEE ACORD 101	04/01/2021	04/01/2022	X PER STATUTE OTH-ER	
	ANYPROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH) Y/N N	N / A					E.L. EACH ACCIDENT	$ 2,000,000
	If yes, describe under DESCRIPTION OF OPERATIONS below						E.L. DISEASE - EA EMPLOYEE	$ 2,000,000
							E.L. DISEASE - POLICY LIMIT	$ 2,000,000
C	ARCHITECTS & ENG.			EON G21654693 005	04/01/2021	04/01/2022	Per Claim/Agg	4,000,000
	PROFESSIONAL LIAB.			"CLAIMS MADE"			Defense Included	

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)
Re: Client Contract Number S35123-03C

Nassau County is named as additional insured for GL coverage, but only as respects work performed by or on behalf of the named insured and where required by written contract.

CERTIFICATE HOLDER

Nassau County
Acting on behalf of the County Department of Public Works
Attn: Adrian O. Hamilton, Project Manager
One West Street
Mineola, NY 11501

CANCELLATION

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

AUTHORIZED REPRESENTATIVE

Marsh Risk & Insurance Services

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AGENCY CUSTOMER ID: CN101348564
LOC #: Los Angeles

ADDITIONAL REMARKS SCHEDULE

AGENCY	NAMED INSURED
Marsh Risk & Insurance Services	AECOM AECOM USA Inc. 200 Broadhollow Road, Suite 207 Melville, NY 11747
POLICY NUMBER	
CARRIER / NAIC CODE	EFFECTIVE DATE:

ADDITIONAL REMARKS

THIS ADDITIONAL REMARKS FORM IS A SCHEDULE TO ACORD FORM,
FORM NUMBER: 25 FORM TITLE: Certificate of Liability Insurance

Workers Compensation/Employer Liability cont.

Policy Number	Insurer	States Covered
WLR C67806025	Indemnity Insurance Company of North America - NAIC # 43575	AOS
WLR C67805987	ACE American Insurance Company - NAIC # 22667	CA, MA
SCF C67806104	ACE American Insurance Company - NAIC # 22667	WI Retro

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NEW YORK STATE | Workers' Compensation Board

CERTIFICATE OF INSURANCE COVERAGE

DISABILITY AND PAID FAMILY LEAVE BENEFITS LAW

PART 1. To be completed by Disability and Paid Family Leave Benefits Carrier or Licensed Insurance Agent of that Carrier

1a. Legal Name & Address of Insured (use street address only)

AECOM USA INC.
605 3RD AVENUE
NEW YORK, NY 10158

Work Location of Insured *(Only required if coverage is specifically limited to certain locations in New York State, i.e., Wrap-Up Policy)*

1b. Business Telephone Number of Insured

208-863-2554

1c. Federal Employer Identification Number of Insured or Social Security Number

135511947

2. Name and Address of Entity Requesting Proof of Coverage (Entity Being Listed as the Certificate Holder)

Nassau County
County Department of Public Works
One West Street
Mineola, NY 11501

3a Name of Insurance Carrier

HARTFORD LIFE AND ACCIDENT

3b Policy Number of Entity Listed in Box "1a"

LNY709423

3c Policy effective period

01-01-2021 to 12-31-2021

4. Policy provides the following benefits:

- [x] **A. Both disability and paid family leave benefits.**
- [ ] **B. Disability benefits only.**
- [ ] **C. Paid family leave benefits only.**

5. Policy covers:

- [x] **A. All of the employer's employees eligible under the NYS Disability and Paid Family Leave Benefits Law.**
- [ ] **B. Only the following class or classes of employer's employees:**

Under penalty of perjury, I certify that I am an authorized representative or licensed agent of the insurance carrier referenced above and that the named insured has NYS Disability and/or Paid Family Leave Benefits insurance coverage as described above.

Date Signed 10-27-2021 *Elizabeth Tello*

(Signature of insurance carrier's authorized representative or NYS Licensed Insurance Agent of that insurance carrier)

Telephone Number (212) 553-8074 **Name and Title:** Elizabeth Tello – Assistant Director, Statutory Services

IMPORTANT: If Boxes 4A and 5A are checked, and this form is signed by the insurance carrier's authorized representative or NYS Licensed Insurance Agent of that carrier, this certificate is COMPLETE. Mail it directly to the certificate holder.

If Box 4B, 4C or 5B is checked, this certificate is NOT COMPLETE for purposes of Section 220, Subd. 8 of the NYS Disability and Paid Family Leave Benefits Law. It must be mailed for completion to the Workers' Compensation Board, Plans Acceptance Unit, PO Box 5200, Binghamton, NY 13902-5200.

PART 2. To be completed by the NYS Workers' Compensation Board (Only if Box 4C or 5B of Part 1 has been checked)

State of New York
Workers' Compensation Board

According to information maintained by the NYS Workers' Compensation Board, the above-named employer has complied with the NYS Disability and Paid Family Leave Benefits Law with respect to all of his/her employees.

Date Signed **By**

(Signature of Authorized NYS Workers' Compensation Board Employee)

Telephone Number **Name and Title**

Please Note: Only insurance carriers licensed to write NYS disability and paid family leave benefits insurance policies and NYS licensed insurance agents of those insurance carriers are authorized to issue Form DB-120.1. Insurance brokers are NOT authorized to issue this form.

Additional Instructions for Form DB-120.1

By signing this form, the insurance carrier identified in Box 3 on this form is certifying that it is insuring the business referenced in box "1 a" for disability and/or paid family leave benefits under the New York State Disability and Paid Family Leave Benefits Law. The Insurance Carrier or its licensed agent will send this Certificate of Insurance to the entity listed as the certificate holder in Box 2.

The insurance carrier must notify the above certificate holder and the Workers' Compensation Board within 10 days IF a policy is cancelled due to nonpayment of premiums or within 30 days IF there are reasons other than nonpayment of premiums that cancel the policy or eliminate the insured from coverage indicated on this Certificate. (These notices my be sent by regular mail.) Otherwise, this Certificate is valid for one year after this form is approved by the insurance carrier or its licensed agent, or until the policy expiration date listed in Box 3c, whichever is earlier

This certificate is issued as a matter of information only and confers no rights upon the certificate holder. This certificate does not amend, extend or alter the coverage afforded by the policy listed, nor does it confer any rights or responsibilities beyond those contained in the referenced policy.

This certificate may be used as evidence of a Disability and/or Paid Family Leave Benefits contract of insurance only while the underlying policy is in effect.

Please Note: Upon the cancellation of the disability and/or paid family leave benefits policy indicated on this form, if the business continues to be named on a permit, license or contract issued by a certificate holder, the business must provide that certificate holder with a new Certificate of NYS Disability and/or Paid Family Leave Benefits Coverage or other authorized proof that the business is complying with the mandatory coverage requirements of the New York State Disability and Paid Family Leave Benefits Law.

DISABILITY AND PAID FAMILY LEAVE BENEFITS LAW

§220. Subd. 8

(a) The head of a state or municipal department, board, commission or office authorized or required by law to issue any permit for or in connection with any work involving the employment of employees in employment as defined in this article, and not withstanding any general or special statute requiring or authorizing the issue of such permits, shall not issue such permit unless proof duly subscribed by an insurance carrier is produced in a form satisfactory to the chair, that the payment of disability benefits and after January first, two thousand and twenty-one, the payment of family leave benefits for all employees has been secured as provided by this article. Nothing herein, however, shall be construed as creating any liability on the part of such state or municipal department, board, commission or office to pay any disability benefits to any such employee if so employed.

(b) The head of a state or municipal department, board, commission or office authorized or required by law to enter into any contract for or in connection with any work involving the employment of employees in employment as defined in this article and notwithstanding any general or special statute requiring or authorizing any such contract, shall not enter into any such contract unless proof duly subscribed by an insurance carrier is produced in a form satisfactory to the chair, that the payment of disability benefits and after January first, two thousand eighteen, the payment of family leave benefits for all employees has been secured as provided by this article.

COUNTY OF NASSAU
DEPARTMENT OF PUBLIC WORKS

Inter-Departmental Memo

TO: Office of the County Executive
Att: Brian J. Schneider, Deputy County Executive

FROM: Department of Public Works

DATE: May 4, 2021

SUBJECT: Authorization to Amend Professional Services Agreement with
AECOM USA, Inc.
Bay Park Sewage Treatment Plant
Raw Sewage Pumps Facility Improvements
Design Services
Agreement No. S35121-03C
Encumbrance No.: CFPW15000058

This Department is requesting approval to amend the existing personal services agreement S35121-03C with the firm AECOM USA, Inc. This amendment is necessary to continue with the design-related construction services in connection with the Raw Sewage Pumps Facility Improvements.

AECOM USA, Inc. has been providing engineering services for the subject project; however, the term of their personal services agreement expires on December 31, 2021, after having utilized the single two-year extension allowed by contract. It is the intent of this Department to amend the existing agreement to extend those services for an additional 24 months from January 1, 2022 to December 31, 2023, with an option for two (2) one-year extensions, without an increase in fee.

The Raw Sewage Pumps Facility Improvements Project was issued NTP on May 3, 2021. Construction completion is scheduled on October 18, 2023. AECOM' services are required until December 31, 2024, in order to cover the completion of construction activities plus the one (1) year O&M period. The requested extension will allow AECOM to complete the contracted services.

This contract has insufficient term due to the term being fixed at the outset of the project. The design was also shelved for more than a year due to construction sequencing. The project could not be advertised until the Phase E3 and Stormwater Pump Station work at the north end of the plant was near completion. In addition, NTP on the construction was delayed by more than a year due to the bid withdrawal by the low bidder at a late stage in the contract award process. This caused additional delays as the award to the 2nd low bidder had to be repeated from the start.

SUBJECT: Authorization to Amend Professional Services Agreement with
AECOM USA, Inc.
Bay Park Sewage Treatment Plant
Raw Sewage Pumps Facility Improvements
Design Services
Agreement No. S35121-03C
Encumbrance No.: CFPW15000058

If you approve or disapprove of the above request, please signify below and return the memo to this office for appropriate action.

Kenneth G. Arnold
Commissioner

KGA:VF:rp
c: Christopher Nolan, Deputy Budget Director
Vincent Falkowski, Deputy Commissioner
Roseann D'Alleva, Deputy Commissioner
Loretta Dionisio, Assistant to Deputy Commissioner
Karen Fay, Sanitary Engineer III
Eric Mills, Anna Walsh, Hazen/Arcadis JV

APPROVED:

05/04/2021
Brian J. Schneider Date
Deputy County Executive

DISAPPROVED:

Brian J. Schneider Date
Deputy County Executive

U.S. DEPARTMENT OF JUSTICE
OFFICE OF JUSTICE PROGRAMS
OFFICE OF THE COMPTROLLER

Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion Lower Tier Covered Transactions (Sub-Recipient)

This certification is required by the regulations implementing Executive Order 12549, Debarment and Suspension, 28 CFR Part 67, Section 67.510, Participants' responsibilities. The regulations were published as Part VII of the May 26, 1988 *Federal Register* (pages 19160-19211).

(BEFORE COMPLETING CERTIFICATION, READ INSTRUCTIONS ON REVERSE)

(1) The prospective lower tier participant certifies, by submission of this proposal, that neither it nor its principals are presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in this transaction by any Federal department of agency.

(2) Where the prospective lower tier participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

Robert Orlin, VP & Secretary — 12/17/2021

Name and Title of Authorized Representative — m/d/yy

Signature — 12/17/2021 Date

AECOM USA, Inc.

Name of Organization

605 Third Ave, New York, NY 10158

Address of Organization

LAURA CURRAN
NASSAU COUNTY EXECUTIVE

KENNETH G. ARNOLD, P.E.
COMMISSIONER

COUNTY OF NASSAU
DEPARTMENT OF PUBLIC WORKS
1194 PROSPECT AVENUE
WESTBURY, NEW YORK 11590-2723

December 27, 2019

Paul Storella, P.E., Senior Vice President
AECOM
125 Broad Street
New York, New York 10004

Re: Bay Park Sewage Treatment Plant
Raw Sewage Pumps Improvements
Design Services
Agreement No. S35121-03C
Extension of Time

Dear Mr. Storella:

We are in receipt of your attached letter dated December 19, 2019, requesting a two (2) year time extension for the above referenced contract. The term of the subject agreement was forty-six (46) months and twenty-nine (29) days commencing on February 3, 2016 and terminating December 31, 2019. By mutual agreement both Nassau County and AECOM agree to extend the agreement for two (2) years to December 31, 2021. You are hereby advised that an extension of time for construction design services is granted to **December 31, 2021**. All other terms and conditions of the agreement remain the same.

Should you have any questions, please contact Mr. Vincent Falkowski of this office at 516-571-7515.

Very truly yours,

Kenneth G. Arnold, P.E.
Commissioner of Public Works

KGA:VF:rp
Attachment
c: Hon. Jack Schnirman, Comptroller, Office of the Comptroller
Vincent Falkowski, Deputy Commissioner of Environmental Programs
John Domenica, Sanitary Engineer III
Tina Hu, AECOM
Robert Pedenzin, Hazen & Sawyer
Eric Mills, Hazen & Sawyer
Josephine Santoro, Hazen & Sawyer

CFPW15000058

Contract ID#: S35121-03C

Department: Public Works

CF (Capital)

CF E-246-15

Contract Details

SERVICE: Detailed Design Services

NIFS ID #: CFPW15000058 NIFS Entry Date: 12/10/15 Term: from Execution to 12/31/2019

New ☒ Renewal ☐	
Amendment ☐	
Time Extension ☐	
Addl. Funds ☐	
Blanket Resolution ☐ RES#	

1) Mandated Program:	Yes ☒	No ☐
2) Comptroller Approval Form Attached:	Yes ☒	No ☐
3) CSEA Agmt. § 32 Compliance Attached:	Yes ☒	No ☐
4) Vendor Ownership & Mgmt. Disclosure Attached:	Yes ☒	No ☐
5) Insurance Required	Yes ☒	No ☐

Agency Information

Vendor	
Name AECOM USA, Inc.	Vendor ID# **13-5511947**
Address 605 Third Avenue New York , NY 10158	Contact Person **Paul F. Storella, Vice Pres.** Phone **(212) 984-7300**

County Department
Department Contact **Joseph L. Davenport**
Address **3340 Merrick Rd** **Wantagh, New York 11973**
Phone **(516) 571-7508**

Routing Slip

DATE Rec'd.	DEPARTMENT	Internal Verification	DATE Appv'd & Fw'd.	SIGNATURE	Leg. Approval Required
	Department	*NIFS Entry (Dept)* *NIFS Appvl (Dept. Head)* ☐	12/14/15		
	DPW (Capital Only)	*CF Capital Fund Approval* ☐	12/14/15		
	OMB	*NIFS Approval* ☐	12/14/15		Yes ☐ No ☐ Not required if Blanket Res.
12/14/15	County Attorney	*CA RE & Insurance Verification* ☑	12/14/15		
12/14/15	County Attorney	*CA Approval as to form* ☑	12/14/15		Yes ☑ No ☐
	Legislative Affairs	*Fw'd Original Contract to CA* ☐			
	Rules ☐/ Leg. ☐	☐			
	County Attorney	*NIFS Approval* ☐	01/07/2016		
	Comptroller	*NIFS Approval* ☑	1/22/16		
	County Executive	*Notarization* *Filed with Clerk of the Leg.* ☐	1/11/16		

K:\ADMIN\Letters for Signature\Water Management\Perfetti\S35121-03C AECOM Design Staff Summary.doc

Contract ID#: S35121-03C

Department: Public Works

Contract Summary

Description: Bay Park Sewage Treatment Plant Raw Sewage Pumping Facility Improvements ~ Detailed Design Services

Purpose: Professional services in regard to the design of improvements to the Raw Sewage Pumping Facility at the Bay Park Sewage Treatment Plant (STP). The facility pumps, motors, electrical equipment were damaged as a result of hurricane Sandy and this design contract will replace/repair and harden the facility against future storm events.

Method of Procurement: Qualification Based Selection (QBS) procedure for the procurement of professional services, developed in accordance with procedures stipulated in the Board of Supervisor's Resolution 928-1993 and the County Executive's Order No. 1-1993.

Procurement History: The Request for Proposals (RFP) was prepared in accordance with the Department's policy for assessing technical understanding, statement of qualifications and proposed project schedule. The RFP was posted on the County's website and advertised in Newsday. Proposals were received from four (4) firms on March 27, 2015. The technical proposals were evaluated by professionals from within the Department of Public Works. Following the review, the technical rank was established and the cost proposals were reviewed. The proposal submitted by AECOM having the highest technical rating and a reasonable cost, represents the best value to the County.

Description of General Provisions: The firm will prepare detailed design documents (plans and specifications) suitable for public bidding purposes. The firm will also provide construction phase design services (shop drawing review, proposed substitution review, etc.).

Impact on Funding/Price Analysis: Funding for these services will be from Capital Project No. 35121. It is expected that the full cost of these services will be eligible for reimbursement by the Federal Emergency Management Agency (FEMA) under the Robert T. Stafford Disaster Relief and Emergency Assistance Act.

Change in Contract from Prior Procurement: N/A

Recommendation: Approve as submitted

Advisement Information

BUDGET CODES	
Fund:	CSW
Control:	35
Resp:	121
Object:	
Transaction:	

FUNDING SOURCE	AMOUNT
Revenue Contract ☐	
County	$ 1,287,800.00
Federal	$
State	$
Capital	$
Other	$
TOTAL	$ 1,287,800.00

LINE	INDEX/OBJECT CODE	AMOUNT
1	CSW; 35121	$ 1,287,800.00
2		$
3		$
APPROVED: 10/14/15		$
		$
INSURANCE SECTION		$
	TOTAL	$ 1,287,800.00

RENEWAL	
% Increase	
% Decrease	

Document Prepared By: Joseph L. Davenport, Chief Sanitary Engineer Date:

NIFS Certification	Comptroller Certification	County Executive Approval
I certify that this document was accepted into NIFS.	I certify that an unencumbered balance sufficient to cover this contract is present in the appropriation to be charged.	Name
Name Michael L Cohen	Name	Date 1/11/16
Date 1/22/2016	Date 1/22/2016	(For Office Use Only) E #:

C-246-15

RULES RESOLUTION NO. 313 2015

A RESOLUTION AUTHORIZING THE COUNTY EXECUTIVE TO EXECUTE A PERSONAL SERVICES AGREEMENT BETWEEN THE COUNTY OF NASSAU, ACTING ON BEHALF OF THE DEPARTMENT OF PUBLIC WORKS, AND AECOM USA, INC.

Passed by the Rules Committee
Nassau County Legislature
By Voice Vote on 12/21/15
VOTING:
ayes 4 nayes 0 abstained 3 recused 0
Legislators present: 7

WHEREAS, the County has negotiated a personal services agreement with AECOM USA, Inc. in connection with design services for improvements to the Raw Sewage Pumping Facility at the Bay Park Sewage Treatment Plant, a copy of which is on file with the Clerk of the Legislature; now, therefore, be it

RESOLVED, that the Rules Committee of the Nassau County Legislature authorizes the County Executive to execute the agreement with AECOM USA, Inc.

FINAL DESIGN ENGINEER - CONTRACT FOR SERVICES

THIS AGREEMENT (together with the schedules, appendices, attachments and exhibits, if any, this "Agreement"), dated as of the date this Agreement is executed by the County of Nassau, between (i) Nassau County, a municipal corporation having its principal office at One West Street, Mineola, New York 11501 (the "County") acting on behalf of the County Department of Public Works, having its principal office at 1194 Prospect Avenue, Westbury, New York 11590 (the "Department") and (ii)) AECOM USA, Inc., a consulting engineering firm having its principal office at 605 Third Avenue, New York, NY 10158 (the "Final Design Engineer (FDE)" or the "Contractor").

W I T N E S S E T H:

WHEREAS, the County desires to hire the FDE to perform the services described in this Agreement; and

WHEREAS, this is a personal service contract within the intent and purview of Section 2206 of the County Charter;

WHEREAS, the FDE desires to perform the services described in this Agreement.

NOW, THEREFORE, in consideration of the premises and mutual covenants contained in this Agreement, the parties agree as follows:

1. Term.

This term of this Agreement shall commence on the date on which this Agreement is executed by the County (the "Commencement Date") and terminate on December 31, 2019 (the "Expiration Date") unless sooner terminated or extended in accordance with its terms. Notwithstanding the foregoing, the Department, in its sole discretion, shall have the right to extend this Agreement for a period of up to two (2) years by delivering a notice of extension to the FDE at least thirty (30) days prior to the Expiration Date. The Agreement so extended shall be on the same terms, conditions and covenants as during the initial term except that the Expiration Date shall be modified in accordance with the notice of extension.

2. Services, Extra Services and Reimbursable Expenses.

(a) The services to be provided by the FDE under this Agreement consist of the final design and construction phase services for the Raw Sewage Pumping System Improvements at the Bay Park STP. The specific work divisions and deliverables related to this project are more particularly described in the "Detailed Scope of Services," attached hereto and hereby made a part hereof as Appendix "A".

(b) At any time during the term of this Agreement, the County may, in its sole and absolute discretion, require the FDE to perform Extra Services. The FDE shall not perform, nor be compensated for, Extra Services without the prior written approval of the Commissioner. The FDE agrees to perform any such Extra Services in accordance with the terms and conditions contained in this Agreement. As used herein, "Extra Services" means additional services which are (i) generally within the scope of services set forth in this Agreement, (ii) necessary or in furtherance of the goals of this Agreement and (iii) not due to the fault or negligence of the FDE.

(c) The following items are not included in the FDE's fee, and shall be reimbursable at an actual cost as expenditures in the interest of the project, provided (i) they have been approved in advance by the Commissioner of the Department in writing, in his/her sole discretion, (ii) are not considered services as set forth in this Agreement, and (iii) subject to compliance with the County's bill paying procedures:

(1) The direct cost of expenses for travel to locations other than the County and or the project site, including transportation (coach unless otherwise authorized by the County), reasonable meal and

lodging expenses, at rates established by the County for its own employees, and as have been approved in advance by the County.

(2) Testing Laboratory Services.

(3) Messenger service and cables as not necessarily incurred in the performance of services hereunder by the FDE and their sub-consultants.

(4) Final models, photographs and renderings as requested by the County.

(5) Reproduction of design development and construction document drawings, specification, reports and other documents furnished to, or on behalf of, the County in excess of five (5) copies each. Any items prepared on behalf on the FDE or their sub-consultants shall not be paid for by the County.

(6) Other comparable expenses as approved by the County.

3. Payment.

(a) Amount of Consideration. The amount to be paid to the FDE as full consideration for the FDE's services under this Agreement shall be payable as set forth in the "Payment Schedule," attached hereto and made a hereby part hereof as Appendix "B". Notwithstanding the foregoing, the maximum amount to be paid to the FDE for the FDE's services under this Agreement, including any Extra Services that may be so authorized, shall not exceed one million two hundred eighty seven thousand eight hundred ($1,287,800) dollars.

(b) Vouchers; Voucher Review, Approval and Audit. Payments shall be made to the FDE in arrears and shall be contingent upon (i) the FDE submitting a claim voucher (the "Voucher") in a form satisfactory to the County, that (a) states with reasonable specificity the services provided and the payment requested as consideration for such services, (b) certifies that the services rendered and the payment requested are in accordance with this Agreement, and (c) is accompanied by documentation satisfactory to the County supporting the amount claimed, and (ii) review, approval and audit of the Voucher by the Department and/or the County Comptroller or his or her duly designated representative (the "Comptroller").

(c) Timing of Payment Claims. The FDE shall submit claims no later than three (3) months following the County's receipt of the services that are the subject of the claim and no more frequently than once a month.

(d) No Duplication of Payments. Payments under this Agreement shall not duplicate payments for any work performed or to be performed under other agreements between the FDE and any funding source including the County.

(e) Payments in Connection with Termination or Notice of Termination. Unless a provision of this Agreement expressly states otherwise, payments to the Contractor following the termination of this Agreement shall not exceed payments made as consideration for services that were (i) performed prior to termination, (ii) authorized by this Agreement to be performed, and (iii) not performed after the Contractor received notice that the County did not desire to receive such services.

(f) Payments Relating to Services Rendered by Subcontractors. The County retains the right, but not the obligation, prior to making any payment to the FDE, to demand that the FDE furnish to the County, proof acceptable to the County, in its sole and absolute discretion, that all due and payable claims made by subcontractors in connection with this Agreement have been paid to date or are included in the amount being requested by the FDE.

4. Ownership and Control of Work Product

(a) Copyrights.

(i) Upon execution of this Agreement, any reports, documents, data, photographs and/or other materials produced pursuant to this Agreement, and any and all drafts and/or other preliminary materials in any format related to such items, shall become the exclusive property of the County.

(ii) Any reports, documents, data, photographs and/or other materials produced pursuant to this Agreement ("Copyrightable Materials") shall be considered "work-made-for-hire" within the meaning and purview of Section 101 of the United States Copyright Act, 17 U.S.C. §101, and the County shall be the copyright owner thereof and of all aspects, elements and components thereof in which copyright protection might exist. To the extent that the Copyrightable Materials do not qualify as "work-made-for-hire," the FDE hereby irrevocably transfers, assigns and conveys exclusive copyright ownership in and to the Copyrightable Materials to the County, free and clear of any liens, claims, or other encumbrances. The FDE shall retain no copyright or intellectual property interest in the Copyrightable Materials, and they shall be used by the FDE for no other purpose without the prior written permission of the County.

(iii) The FDE acknowledges that the County may, in its sole discretion, register copyright in the copyright registrations. The FDE shall cooperate in this effort, and agrees to provide any further documentation necessary to accomplish this.

(iv) The FDE represents and warrants that the Copyrightable Materials: (1) are wholly original material not published elsewhere (except for material that is in the public domain); (2) do not violate any copyright law; (3) do not constitute defamation or invasion of the right of privacy or publicity, and (4) are not an infringement of any kind, of the rights of any third party. To the extent that the Copyrightable Materials incorporate any non-original material, the FDE has obtained all necessary permissions and clearances, in writing, for the use of such non-original material under this Agreement, copies of which shall be provided to the County upon execution of this Agreement.

(b) Patents and Inventions. Any discovery or invention arising out of or developed in the course of performance of this Agreement shall be promptly and fully reported to the Department, and if this work is supported by a federal grant of funds, shall be promptly and fully reported to the Federal Government for determination as to whether patent protection on such invention shall be sought and how the rights in the invention or discovery, including rights under any patent issued thereon, shall be disposed of and administered in order to protect the public interest.

(c) Pre-existing Rights. In no case shall 4(a) or 4(b) above apply to, or prevent the FDE from asserting or protecting its rights in any report, document or other data, or any invention which existed prior to or was developed or discovered independently from the activities directly related to this Agreement.

(d) Infringements of Patents, Trademarks, and Copyrights. The FDE shall indemnify and hold the County harmless against any claim for any infringement by the FDE of any copyright, trade secrets, trademark or patent rights of design, systems, drawings, graphs, charts, specifications or printed matter furnished or used by the FDE in the performance of this Agreement. The FDE shall indemnify and hold the County harmless regardless of whether or not the infringement arises out of compliance with the scope of services/scope of work.

(e) Antitrust. The FDE hereby assigns, sells, and transfers to the County all right, title and interest in and to any claims and causes of action arising under the antitrust laws of the State of New York or of the United States relating to the particular goods or services procured by the County under this Agreement.

5. Independent Contractor. The FDE is an independent contractor of the County. The FDE shall not, nor shall any officer, director, employee, servant, agent or independent contractor of the Contractor (a "Contractor Agent"), be (i) deemed a County employee, (ii) commit the County to any obligation, or (iii) hold itself, himself, or herself out as a County employee or Person with the authority to commit the County to any obligation. As used in this Agreement the word "Person" means any individual person, entity (including partnerships, corporations and limited liability companies), and government or political subdivision thereof (including agencies, bureaus, offices and departments thereof).

6. No Arrears or Default. The FDE is not in arrears to the County upon any debt or contract and it is not in default as surety, contractor, or otherwise upon any obligation to the County, including any obligation to pay taxes to, or perform services for or on behalf of, the County.

7. Compliance with Law.

(a) Generally. The FDE shall comply with any and all applicable Federal, State and local Laws, including, but not limited to those relating to conflicts of interest, human rights, a living wage, and disclosure of information, in connection with its performance under this Agreement. In furtherance of the foregoing, the FDE is bound by and shall comply with the terms of Appendix "EE" attached hereto and hereby made a part hereof. As used in this Agreement the word "Law" includes any and all statutes, local laws, ordinances, rules, regulations, applicable orders, and/or decrees, as the same may be amended from time to time, enacted, or adopted.

(b) Nassau County Living Wage Law. Pursuant to LL 1-2006, as amended, and to the extent that a waiver has not been obtained in accordance with such law or any rules of the County Executive, the Contractor agrees as follows:

(i) FDE shall comply with the applicable requirements of the Living Wage Law, as amended;

(ii) Failure to comply with the Living Wage Law, as amended, may constitute a material breach of this Agreement, such breach being determined solely by the County. Contractor has the right to cure such breach within thirty days of receipt of notice of breach from the County. In the event that such breach is not timely cured, the County may terminate this Agreement as well as exercise any other rights available to the County under applicable law.

(iii) On a yearly basis, FDE shall provide the County with any material changes to its Certificate of Compliance, attached hereto and hereby made a part hereof as Appendix "L."

(c) Records Access. The parties acknowledge and agree that all records, information, and data ("Information") acquired in connection with performance or administration of this Agreement shall be used and disclosed solely for the purpose of performance and administration of the contract or as required by law. The FDE acknowledges that Contractor Information in the County's possession may be subject to disclosure under Article 6 of the New York State Public Officer's Law ("Freedom of Information Law" or "FOIL"). In the event that such a request for disclosure is made, the County shall make reasonable efforts to notify the Contractor of such request prior to disclosure of the Information so that the FDE may take such action as it deems appropriate.

(d) Protection of Client Information. The FDE acknowledges and agrees that all information that the FDE acquires in connection with performance under this Agreement shall be strictly confidential, used solely for the purpose of performing services to or on behalf of the County, and shall not be disclosed to third parties except (i) as permitted under this Agreement, (ii) with the written consent of the County (and then only to the extent of the consent), or (iii) upon legal compulsion.

8. Minimum Service Standards. Regardless of whether required by Law:

(a) The FDE shall, and shall cause Contractor Agents to, conduct its, his or her activities in connection with this Agreement so as not to endanger or harm any Person or property.

(b) The FDE shall deliver services under this Agreement in a professional manner in conformance with the care and skill ordinarily exercised by similar members of the profession practicing under similar conditions at the same time, in the same or similar locality. The FDE shall take all actions necessary or appropriate to meet the obligation described in the immediately preceding sentence, including obtaining and maintaining, and causing all Contractor Agents to obtain and maintain, all approvals, licenses, and certifications ("Approvals") necessary or appropriate in connection with this Agreement.

9. Indemnification; Defense; Cooperation.

(a) The FDE shall be solely responsible for and shall indemnify and hold harmless the County, the Department and its officers, employees, and agents (the "Indemnified Parties") from and against any and all liabilities, losses, costs, expenses (including, without limitation, attorneys' fees and disbursements) and damages ("Losses"), arising out of or in connection with any (i) negligent acts, errors, or omissions; of the FDE or a FDE Agent, including Losses in connection with any threatened investigation, litigation or other proceeding or preparing a defense to or prosecuting the same; provided, however, that the FDE shall not be responsible for that portion, if any, of a Loss that is caused by the negligence of the County.

(b) The FDE shall, upon the County's demand and at the County's direction, promptly and diligently defend, at the FDE's own risk and expense, any and all suits, actions, or proceedings which may be brought or instituted against one or more Indemnified Parties for which the FDE is responsible under this Section, and, further to the FDE's indemnification obligations, the FDE shall pay and satisfy any judgment, decree, loss or settlement in connection therewith.

(c) The FDE shall, and shall cause Contractor Agents to, cooperate with the County and the Department in connection with the investigation, defense or prosecution of any action, suit or proceeding in connection with this Agreement, including the acts or omissions of the Contractor and/or a Contractor Agent in connection with this Agreement.

(d) The provisions of this Section shall survive the termination of this Agreement.

10. Insurance.

(a) Types and Amounts. The FDE shall obtain and maintain throughout the term of this Agreement, at its own expense: (i) one or more policies for commercial general liability insurance, which policy(ies) shall name "Nassau County" as an additional insured and have a minimum single combined limit of liability of not less than one million dollars ($1,000,000) per occurrence and two million dollars ($2,000,000) aggregate coverage, (ii) if contracting in whole or part to provide professional services, one or more policies for professional liability insurance, which policy(ies) shall have a minimum single combined limit liability of not less than two million dollars ($2,000,000) per claim and four million dollars ($4,000,000) aggregate coverage, (iii) compensation insurance for the benefit of the FDE's employees ("Workers' Compensation Insurance"), which insurance is in compliance with the New York State Workers' Compensation Law, and (iv) such additional insurance as the County may from time to time specify.

(b) Acceptability; Deductibles; Subcontractors. All insurance obtained and maintained by the Contractor pursuant to this Agreement shall be (i) written by one or more commercial insurance carriers licensed to do business in New York State and acceptable to the County, and which is (ii) in form and substance acceptable to the County. The FDE shall be solely responsible for the payment of all deductibles to which such policies are subject. The FDE shall require any subcontractor hired in connection with this Agreement to carry insurance with the same limits and provisions required to be carried by the FDE under this Agreement.

(c) Delivery; Coverage Change; No Inconsistent Action. Prior to the execution of this Agreement, copies of current certificates of insurance evidencing the insurance coverage required by this Agreement shall be delivered to the Department. Not less than thirty (30) days prior to the date of any expiration or renewal of, or actual, proposed or threatened reduction or cancellation of coverage under, any insurance required hereunder, the FDE shall provide written notice to the Department of the same and deliver to the Department renewal or replacement certificates of insurance. The FDE shall cause all insurance to remain in full force and effect throughout the term of this Agreement and shall not take or omit to take any action that would suspend or invalidate any of the required coverages. The failure of the FDE to maintain Workers' Compensation Insurance shall render this contract void and of no effect. The failure of the FDE to maintain the other required coverages shall be deemed a material breach of this Agreement upon which the County reserves the right to consider this Agreement terminated as of the date of such failure.

11. Assignment; Amendment; Waiver; Subcontracting. This Agreement and the rights and obligations hereunder may not be in whole or part (i) assigned, transferred or disposed of, (ii) amended, (iii) waived, or (iv) subcontracted, without the prior written consent of the County Executive or his or her duly designated deputy (the "County Executive"), and any purported assignment, other disposal or modification without such prior written

consent shall be null and void. The failure of a party to assert any of its rights under this Agreement, including the right to demand strict performance, shall not constitute a waiver of such rights.

12. Termination.

(a) Generally. This Agreement may be terminated (i) for any reason by the County upon thirty (30) days' written notice to the FDE, (ii) for "Cause" by the County immediately upon the receipt by the FDE of written notice of termination, (iii) upon mutual written Agreement of the County and the FDE, and (iv) in accordance with any other provisions of this Agreement expressly addressing termination.

As used in this Agreement the word "Cause" includes: (i) a breach of this Agreement; (ii) the failure to obtain and maintain in full force and effect all Approvals required for the services described in this Agreement to be legally and professionally rendered; and (iii) the termination or impending termination of federal or state funding for the services to be provided under this Agreement.

(b) By the FDE. This Agreement may be terminated by the FDE if performance becomes impracticable through no fault of the FDE, where the impracticability relates to the FDE's ability to perform its obligations and not to a judgment as to convenience or the desirability of continued performance. Termination under this subsection shall be effected by the FDE delivering to the commissioner or other head of the Department (the "Commissioner"), at least sixty (60) days prior to the termination date (or a shorter period if sixty days' notice is impossible), a notice stating (i) that the FDE is terminating this Agreement in accordance with this subsection, (ii) the date as of which this Agreement will terminate, and (iii) the facts giving rise to the FDE's right to terminate under this subsection. A copy of the notice given to the Commissioner shall be given to the Deputy County Executive who oversees the administration of the Department (the "Applicable DCE") on the same day that notice is given to the Commissioner.

(c) FDE Assistance upon Termination. In connection with the termination or impending reasonably requested by the County (including those set forth in other provisions of this Agreement) to assist the County in transitioning the FDE's responsibilities under this Agreement. The provisions of this subsection shall survive the termination of this Agreement.

13. Accounting Procedures; Records. The FDE shall maintain and retain, for a period of six (6) years following the later of termination of or final payment under this Agreement, complete and accurate records, documents, accounts and other evidence, whether maintained electronically or manually ("Records"), pertinent to performance under this Agreement. Records shall be maintained in accordance with Generally Accepted Accounting Principles and, if the Contractor is a non-profit entity, must comply with the accounting guidelines set forth in the federal Office of Management & Budget Circular A-122, "Cost Principles for Non-Profit Organizations." Such Records shall at all times be available for audit and inspection by the Comptroller, the Department, any other governmental authority with jurisdiction over the provision of services hereunder and/or the payment therefore, and any of their duly designated representatives. The provisions of this Section shall survive the termination of this Agreement.

14. Limitations on Actions and Special Proceedings against the County. No action or special proceeding shall lie or be prosecuted or maintained against the County upon any claims arising out of or in connection with this Agreement unless:

(a) Notice. At least thirty (30) days prior to seeking relief the FDE shall have presented the demand or claim(s) upon which such action or special proceeding is based in writing to the Applicable DCE for adjustment and the County shall have neglected or refused to make an adjustment or payment on the demand or claim for thirty (30) days after presentment. The Contractor shall send or deliver copies of the documents presented to the Applicable DCE under this Section to each of (i) the Department and the (ii) the County Attorney (at the address specified above for the County) on the same day that documents are sent or delivered to the Applicable DCE. The complaint or necessary moving papers of the Contractor shall allege that the above-described actions and inactions preceded the Contractor's action or special proceeding against the County.

(b) Time Limitation. Such action or special proceeding is commenced within the earlier of (i) one (1) year of the first to occur of (A) final payment under or the termination of this Agreement, and (B) the accrual of the cause of action, and (ii) the time specified in any other provision of this Agreement.

15. Work Performance Liability. The FDE is and shall remain primarily liable for the successful completion of all work in accordance this Agreement irrespective of whether the FDE is using a Contractor Agent to perform some or all of the work contemplated by this Agreement, and irrespective of whether the use of such Contractor Agent has been approved by the County.

16. Consent to Jurisdiction and Venue; Governing Law. Unless otherwise specified in this Agreement or required by Law, exclusive original jurisdiction for all claims or actions with respect to this Agreement shall be in the Supreme Court in Nassau County in New York State and the parties expressly waive any objections to the same on any grounds, including venue and forum non conveniens. This Agreement is intended as a contract under, and shall be governed and construed in accordance with, the Laws of New York State, without regard to the conflict of laws provisions thereof.

17. Notices. Any notice, request, demand or other communication required to be given or made in connection with this Agreement shall be (a) in writing, (b) delivered or sent (i) by hand delivery, evidenced by a signed, dated receipt, (ii) postage prepaid via certified mail, return receipt requested, or (iii) overnight delivery via a nationally recognized courier service, (c) deemed given or made on the date the delivery receipt was signed by a County employee, three (3) business days after it is mailed or one (1) business day after it is released to a courier service, as applicable, and (d)(i) if to the Department, to the attention of the Commissioner at the address specified above for the Department, (ii) if to an Applicable DCE, to the attention of the Applicable DCE (whose name the FDE shall obtain from the Department) at the address specified above for the County, (iii) if to the Comptroller, to the attention of the Comptroller at 240 Old Country Road, Mineola, NY 11501, and (iv) if to the Contractor, to the attention of the person who executed this Agreement on behalf of the FDE at the address specified above for the FDE, or in each case to such other persons or addresses as shall be designated by written notice.

18. All Legal Provisions Deemed Included; Severability; Supremacy and Construction.

(a) Every provision required by Law to be inserted into or referenced by this Agreement is intended to be a part of this Agreement. If any such provision is not inserted or referenced or is not inserted or referenced in correct form then (i) such provision shall be deemed inserted into or referenced by this Agreement for purposes of interpretation and (ii) upon the application of either party this Agreement shall be formally amended to comply strictly with the Law, without prejudice to the rights of either party.

(b) In the event that any provision of this Agreement shall be held to be invalid, illegal or unenforceable, the validity, legality and enforceability of the remaining provisions shall not in any way be affected or impaired thereby.

(c) Unless the application of this subsection will cause a provision required by Law to be excluded from this Agreement, in the event of an actual conflict between the terms and conditions set forth above the signature page to this Agreement and those contained in any schedule, exhibit, appendix, or attachment to this Agreement, the terms and conditions set forth above the signature page shall control. To the extent possible, all the terms of this Agreement should be read together as not conflicting.

(d) Each party has cooperated in the negotiation and preparation of this Agreement. Therefore, in the event that construction of this Agreement occurs, it shall not be construed against either party as drafter.

19. Section and Other Headings. The section and other headings contained in this Agreement are for reference purposes only and shall not affect the meaning or interpretation of this Agreement.

20. Entire Agreement. This Agreement represents the full and entire understanding and agreement between the parties with regard to the subject matter hereof and supersedes all prior agreements (whether written or oral) of the parties relating to the subject matter of this Agreement.

21. Administrative Service Charge. The FDE agrees to pay the County an administrative service charge of Five Hundred Thirty Three Dollars ($533.00) for the processing of this Agreement pursuant to Ordinance Number 74-1979, as amended by Ordinance Number 201-2001. The administrative service charge shall be due and payable to the County by the Contractor upon signing this Agreement.

22. Joint Venture.

(a) If the FDE is comprised of more than one legal entity or any group of partners or joint venturers associated for the purpose of undertaking this Agreement, each such entity acknowledges and hereby affirmatively represents and agrees that each has the power to bind the FDE and each of the others hereunder; and as such, each acts both as principal and agent of the FDE and of each of the others hereunder. Each further acknowledges and agrees that all such entities, partners or joint ventures associated for the purposes of undertaking this Agreement shall be jointly and severally liable to third parties, including but not limited to the County, for the acts or omissions of the FDE or any other entity, partner or joint venture hereunder.

(b) If the FDE is comprised of more than one legal entity or any group of partners or joint ventures associated for the purposes of undertaking this agreement, each such entity acknowledges and hereby affirmatively represents and agrees that the respective rights, duties and liabilities of each hereunder shall be governed by the laws of the State of New York, including but not limited to the New York Partnership Law.

23. Executory Clause. Notwithstanding any other provision of this Agreement:

(a) Approval and Execution. The County shall have no liability under this Agreement (including any extension or other modification of this Agreement) to any Person unless (i) all County approvals have been obtained, including, if required, approval by the County Legislature, and (ii) this Agreement has been executed by the County Executive (as defined in this Agreement).

(b) Availability of Funds. The County shall have no liability under this Agreement (including any extension or other modification of this Agreement) to any Person beyond funds appropriated or otherwise lawfully available for this Agreement, and, if any portion of the funds for this Agreement are from the state and/or federal governments, then beyond funds available to the County from the state and/or federal governments.

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IN WITNESS WHEREOF, the FDE and the County have executed this Agreement as of the date first above written.

AECOM USA, Inc.

By: _____

Name: PAUL F. STORELLA
Title: VICE PRESIDENT
Date: 10-21-15

NASSAU COUNTY

By: _____

Name: CHARLES RIBANDO
Title: DEPUTY COUNTY EXECUTIVE
Date: Charles Ribando

PLEASE EXECUTE IN BLUE INK

[**Note to Departments:** County offices and bureaus that need to approve this Agreement in accordance with the Charter should evidence approval by signing the contract routing form and not by placing a signature on this Agreement.]

STATE OF NEW YORK)
)ss.:
COUNTY OF NASSAU)

On the 16 day of October in the year 2015 before me personally came Paul Stoella to me personally known, who, being by me duly sworn, did depose and say that he or she resides in the County of Nassau ; that he or she is the Vice President. of AECOM , the corporation described herein and which executed the above instrument; and that he or she signed his or her name thereto by authority of the board of directors of said corporation.

NOTARY PUBLIC

MILAGROS OLIVO
Notary Public, State of New York
No. 01OL6201263
Qualified in Nassau County
Commission Expires February 17, 2017

STATE OF NEW YORK)
)ss.:
COUNTY OF NASSAU)

On the 3 day of February in the year 2016 before me personally came Charles R. Bander to me personally known, who, being by me duly sworn, did depose and say that he or she resides in the County of Nassau ; that he or she is a Deputy County Executive of the County of Nassau, the municipal corporation described herein and which executed the above instrument; and that he or she signed his or her name thereto pursuant to Section 205 of the County Government Law of Nassau County.

NOTARY PUBLIC Concetta A. Petrucci

CONCETTA A PETRUCCI
Notary Public, State of New York
No. 01PE6259028
Qualified in Nassau County
Commission Expires April 02, 2016

APPENDIX A
DETAILED SCOPE OF SERVICES

A. Division B - Detailed Design Services

Upon County approval, the FDE agrees to perform all the usual and necessary design services in connection with the preparation of detailed contract drawings, specifications and cost estimates for the Raw Sewage Pumping System Improvements project suitable for public bidding based on this Agreement, the RFP Attachment B – Preliminary Design Package, and the RFP Attachments C and D, which contain Table of Contents of Standard Specifications and list of Standard Details, respectively.

The FDE shall enter into a professional services contract directly with the County. Under a separate agreement, the County has authorized the County's program manager, the Bay Park Recovery Program Management Joint Venture, hereinafter "PM-JV", to serve as the County's agent for the Assignment. The PM-JV's activities will include, but are not necessarily limited to, verifying that the FDE's design conforms to the overall design intent of the County's improvement program, reviewing the FDE's submittals, schedule tracking, review of FDE's payment requests, and tracking progress and status of the assignment and project.

1. Review of the preliminary design documents. If there are exceptions, follow procedure described in Appendix A1 to issue technical memorandum with comments and, if appropriate, issuance of a written amendment to the preliminary design documents. Ultimately, the FDE shall submit to the PM-JV written, unconditional acceptance of the preliminary design documents as finalized.

2. Amend or update the preliminary design documents (RFP Attachment B) prepared by the PM-JV. The PM-JV will furnish to the FDE native electronic files for the FDE's use in amending or updating the preliminary design documents, which are to be submitted by the FDE at the Draft (60% design completion) submittal stage.

3. In order to identify the scope of work pertaining to hazardous materials, if any for this facility (or these facilities), the FDE shall conduct a hazardous materials survey of all structures and equipment to be demolished, removed and disposed of under this project and document the findings in a survey report as part of the final design. The hazardous materials to be addressed include, but are not limited to, asbestos-containing materials, lead paint, mercury and PCB. The Final Design will include the Final Survey Report and requirements that the Contractor follow all Federal, State and local requirements for proper abatement, handling, transport and disposal of all hazardous materials

4. Design Milestones: Submit Draft (60% design completion), Pre-Bid (90% design completion) and Bid Ready (100% design completion) documents for PM-JV review. Components of each such submittal shall include drawings, specifications, other documents that shall be included in the Bid Ready documents, and updated construction cost estimate.

5. For each submittal, the submitted documents shall be furnished in printed and electronic format. Unless a lesser quantity is acceptable to the County and PM-JV, furnish ten, full-sized printed copies (on bond paper) for each submittal, and furnish electronic copy transmitted in form mutually acceptable to the FDE and PM-JV (e.g., compact disc, thumb-drive, or transmitted via e-mail or ftp: site). Electronic copies shall be in both portable document format (PDF) and native file format, unless otherwise agreed upon by the FDE and PM-JV. The County shall have the required number of sets of bid documents printed without the assistance of the FDE.

6. Design Milestone Delivery Dates: Due to the critical nature of this project, the County intends that it be advanced under an aggressive time frame. The Detailed Design Services (Division B) shall be completed within 210 calendar days of the County's authorization to begin services (NTP). Schedule shall accommodate a minimum of 2 weeks of review time for each design submittal package. Below are the milestone dates, if the FDE misses any milestone the County reserves the right to cancel the remainder of the agreement.

Milestone #1:	Draft Submittal (60% Design)	100 days from NTP
Milestone #2:	Pre-Bid Submittal (90% Design)	170 days from NTP
Milestone #3:	Bid Ready (100% Design)	210 days from NTP

7. Drawings: The contract drawings shall be prepared using Autodesk AutoCAD software in a version acceptable to the County/PM-JV. The PM-JV has prepared AutoCAD drawings as part of the preliminary design phase and will furnish to the FDE native files upon award of the contract to the FDE. Such existing AutoCAD files are in 3D format and FDE shall prepare the design using the 3D CAD model for this assignment. The PM-JV has prepared a set of standard details to be used as a starting point by the FDE. FDE shall develop the project details, to the extent possible, from the PM-JV-developed standard details. The FDE shall be responsible for developing all project details, whether or not developed from the standards furnished by the PM-JV. FDE shall have complete professional liability for the project drawings, whether or not developed from the standards furnished by the PM-JV.

8. Specifications: County/PM-JV shall furnish a copy of the County's standard "front-end" documents for bidding and contracting requirements, including the Notice to Bidders, Instructions to Bidders, Proposal (bid form), Agreement, and General Conditions. The Proposal forms, Supplementary or Special Conditions, Division 1 specifications, and all other sections of the specifications shall be developed by the FDE. Bidding and contracting requirements and the specifications shall be organized in accordance with the Construction Specifications Institute's Master Format 1988 edition (e.g., 16 Divisions plus the "front-end"). The PM-JV has prepared a set of standard specifications to be used as a starting point by the FDE. FDE shall develop the project specifications, to the extent possible, from the PM-JV-developed standard specifications. The FDE shall be responsible for developing all project specifications, whether or not developed from the County's standard specifications. FDE shall have complete professional liability for the project specifications, whether or not developed from the standards furnished by the PM-JV.

9. Cost Estimate: A complete construction cost estimate, including all construction factors, allowances (if any), alternate bid items, contingencies, costs for the construction contractor's "general conditions" and "Division 1" costs, and contractor's overhead and profit, shall be furnished with each design milestone submittal. It is anticipated that the accuracy of such cost estimates shall increase with each successive milestone submittal. Submit three (3) copies of the detailed construction cost estimate at each of the design milestone points defined above. The estimates shall be developed in accordance with the following standards:

   a. Design Development – Construction Cost Estimate

      Develop a Design Development construction cost estimate, based upon a 60% +/- design at the end of the 60% Design Development Phase of the project. This shall be considered a Class 2 cost estimate in accordance with AACE International recommended Practice 18R-97 (Revised 2011). Provide a Basis of Estimate document in accordance with AACE International Recommended Practice No. 34R-05.

Develop a Design Development construction cost estimate, based on the 90% +/- design at the end of the 90% Design Development Phase of the project. This shall be considered a Class 1 cost estimate in accordance with AACE International recommended Practice 18R-97 (Revised 2011). Provide a Basis of Estimate document in accordance with AACE International Recommended Practice No. 34R-05."

b. Construction Drawing Phase (CDP) – Construction Cost Estimate

Develop a CDP construction cost estimate, based upon a 100% +/- design at the end of the CDP of the project. This shall be considered a Class 1 cost estimate in accordance with AACE International recommended Practice 18R-97 (Revised 2011). Provide a Basis of Estimate document in accordance with AACE International Recommended Practice No. 34R-05.

c. Estimate Methodology

Estimates shall be clearly quantified and detailed as to Labor, Material, and Equipment (construction assistance) components. All estimated Labor shall be developed using current wage rates, crew-based detail, and specific assigned productivities. All estimated Material shall be developed using current local pricing or vendor quotations. All estimated Equipment used for construction assistance shall be clearly defined and costs shall be based on current rental and operating rates. Lump sums or plug numbers should be rarely used and only in cases of scope uncertainty (typically at early design phases) or for quoted prices from Subcontractors that have included all Labor, Material, and Equipment within their quote. Submitted estimates shall contain backup for all pricing components as required.

Provide Markups/Add-On cost factors for all "Below-the-Line" costs, such as Overhead, Profit, Escalation to the Midpoint of Construction, Insurance, and Bond. These factors need to be clearly defined and justified by current construction market standards. Provide backup for all escalation calculations and any relevant allowance or unit price calculations. General Conditions costs are to be estimated in detail and not applied as a factor. Design Contingencies are to be applied in accordance with the design level.

Estimates can be provided in either spreadsheet format (such as Excel) or database formats (such as Sage Timberline). Estimates shall be organized into clear Work Breakdown Structure (WBS) formats at all design levels. Estimate report formats shall be determined by the County/PM-JV, but at a minimum shall include estimate summary reports and detailed estimate reports.

d. FEMA Cost Breakdowns

At the start of the design development, all items that are determined per PM-JV-provided criteria to be reimbursable by FEMA funds shall be segregated and independently estimated at each design level. Final bid documents are required to contain clear bid scope line items for any items that will be reimbursed by FEMA.

e. Deliverables

For each design milestone provide working digital copies of all estimates, as well as PDF versions of all Basis of Estimate reports and estimate summary and detailed reports. All estimates are subject to County/PM-JV review and if

any deficiencies are noted or corrections are required, the estimates shall be returned for resubmission for no additional compensation.

10. Attend review meetings with the County and the PM-JV on the average of twice per month in order to review job progress and to resolve design issues and address and resolve other questions. The FDE shall prepare draft and final minutes of each meeting, and, after County approval, distribute final minutes to all attendees.

11. Prepare and submit the necessary Environmental Impact Forms.

12. Prepare permit applications, reports, documents, submittals, written responses and revised materials required by authorities and agencies having jurisdiction. **This work task shall not be considered complete until it culminates in a permit or pre/post design approval by the appropriate agency or agencies. The FDE must be aware of the latest applicable codes and agency procedural requirements in order to expeditiously complete this design task. Correspondence shall be submitted directly to the agency for review/approval with at least two copies to the County, unless otherwise directed.** Typical regulatory agencies involved in our Environmental Engineering Projects may include but shall not be limited to the following:

    a. Nassau County Fire Marshal - code compliance for fire protection systems (smoke alarms, sprinklers, etc.).
    b. Nassau County Health Dept. - code compliance for hazardous chemical storage/conveyance systems, potable water protection devices, etc.
    c. New York State Dept. of Environmental Conservation – Title V Plant-wide Source Emissions Permits, dewatering application/permit submittals, wetland permits, process related permits, grant related submissions, SPDES General Permit-02 for runoff from construction sites, etc.
    d. New York State Environmental Facilities Corp. - N.Y.S. Revolving Loan Program required submissions.
    e. Recommendations by County's Insurance Bureau.
    f. Other Local agencies (Towns, Villages..)

13. Submit written responses to all County and PM-JV review comments.

14. Make periodic site visits as necessary for a complete understanding of the existing facilities and systems operations.

15. Attend and facilitate pre-bid meeting

16. Review all comments and/or questions posed by prospective bidders. Keep a log of such comments/questions and prepare a draft written response to each for review and comment by the County/PM-JV.

17. Prepare all necessary addenda to the contract documents.

18. Review all bid proposals received and provide representation at the pre-award meetings. Submit a written recommendation regarding award of the construction contracts.

19. Most recent projects solicited by the Nassau County Department of Public Works (County) were procured using the Project Labor Agreement (PLA) originally negotiated in 2011. This PLA stipulates that subsequent projects would need to have individual Project-Specific PLA Addendum signed and

executed by the County and the Nassau Suffolk Building and Construction Trades Council (NSBCTC), and that a separate PLA Feasibility Study would be undertaken for each new project.

It is to be assumed that the County will want to use a PLA for this project if 1) it would otherwise need to be contracted as a Wick's Law multi-prime contract, 2) the project requires significant shift work or night work, or 3) the project has any other compelling reason to utilize a PLA.

The FDE is required under this contract to:

a) Determine with NCDPW whether a PLA is appropriate
b) Conduct and submit a PLA Feasibility Study for this project
c) Draft and submit a PLA Addendum for this project
d) Transmit the PLA Addendum to the NSBCTC, arrange for appropriate signatures, and transmit completed forms to the County
e) Include the PLA and the project-specific PLA Addendum in the project contract documents

Sample PLA Feasibility Studies and Project-Specific PLA Addendum will be made available for FDE use.

20. If requested, the FDE shall provide copies of any and all design calculations.

21. If the total amount of the lowest responsible construction bids should exceed the final approved construction cost, which is based on the FDE's final construction cost estimate, by more than fifteen (15) percent, the County may require the FDE to revise the plans, at no additional cost to the County, so as to stay within the final approved estimated cost of construction. The FDE is responsible for obtaining construction budget information from the County.

The FDE shall not commence the services described in Divisions C, D and E until such time as the necessary capital funds are appropriated by the Nassau County Legislature, encumbered thereof by the Nassau County Comptroller for the required purpose and authorized by the Commissioner.

B. Division C - General Inspection Services

Prior to and during the course of project construction, the FDE shall perform the following General Inspection Services:

1. The estimated construction period for this assignment is expected to be approximately 24 months.

2. Conform the contract bid documents (plans and specifications) to reflect changes made by addenda. Provide the PM-JV with one (1) set of conformed plans and master specification book as a PDF file and bound .DWG plans on a CD. Additionally, provide eight (8) hard copies of the conformed contract documents.

3. Provide representation at the site(s) pre-construction conference.

4. Review and approve detailed construction, shop and erection drawings.

5. Review and approve all proposed deviations and substitutions which do not constitute significant changes to the scope of work or design intent of the contract drawings.

6. Review all laboratory, shop, mill, material and equipment test reports.

7. Prepare supplemental sketches, if required, to reflect actual field conditions.

8. Make periodic field visits as necessary or reasonably required to observe the construction work and confer with the County and Prime Construction Contractors on construction progress and problems which arise during the progress of the construction work.

9. Assist the County and PM-JV in interpreting the construction contract documents.

10. Review change orders and prepare supplementary drawings and detailed independent cost estimates in a timely fashion so as not to impede construction progress.

11. Arrange for the FDE's project manager and support staff to attend update (one [1] per month) and job (one [1] per month) meetings.

12. Witness and provide a written report on shop tests for all major equipment.

12. Provide consultation on special construction problems by specialists in specific fields of work.

13. Assist the County and the PM-JV in the final inspection of the work to determine if each construction contract has been completed in accordance with the contract documents. Provide written certification that project completion was in accordance with the contract documents.

14. Throughout the construction period and at the completion of the construction activities, field verify and check the Prime Construction Contractor's Record Drawings on which the Prime Construction Contractors have indicated changes in the construction work as-built to the extent possible based on the FDE's periodic site visits. This task shall include, but not be limited to the following:

    a. That all equipment is shown as installed and that furnished dimensions are correct.
    b. That all required wiring diagrams, conduit schedules, etc. are provided and are in agreement with the field installation.
    c. That all changes, additions and deletions are shown.
    d. That the record drawings are legible and clearly drawn.
    e. That all supplemental and detailed drawings are included.

15. Check Prime Construction Contractor prepared as-built drawings and modify digital computer files of contract drawings to reflect work as actually constructed. Provide two (2) CD-ROM copies of these as-built digital computer files of the contract drawings.

C. Division D - Facility Operation and Maintenance Manual

Under this division of work, the FDE shall update the pertinent sections of the existing sections of the Bay Park STP Operation and Maintenance Manual ("O&M Manual") using the EPA Publication, " Considerations for preparation of Operation and Maintenance Manuals (EPA-430/9-74001)" as a guideline.

The O&M Manual provides a detailed description of the treatment facilities, process control strategies, start-up and shutdown procedures, laboratory test procedures, emergency response procedures, safety guidelines, troubleshooting procedures, equipment preventive maintenance schedules as well as process flow schematics, isometric figures, cross section and plan diagrams, valve schedules, single line diagrams, and miscellaneous tables.

The completion of the appropriate O&M Manual sections will coincide with each segment of construction. A draft version of the O&M manual sections will be submitted for county review and approval prior to payment for the 90% completion point in construction. A final version of the O&M manual sections will be submitted for County review and approval at the 100% construction completion point to incorporate issues learned during startup. The final O&M manual sections will be supplemented with cataloged and bound copies of the approved equipment manufacturers' O&M Manuals.

Fifteen (15) copies of the draft O&M Manual Sections will be submitted for County review. Two (2) copies of the electronic files (both text and graphics) used to produce the manuals will be turned over to the County. In addition, two (2) hard copies (bound) of the final O&M Manual Sections will be submitted for County review and approval. The County requires compatibility of software as described in the subsequent paragraph.

Prepare and provide to the PM-JV Standard Operating Procedures (SOPs) to assist County staff in the routine operation and monitoring of the new facilities, equipment and/or pump stations. These SOPs will be site and equipment specific and be stand-alone documents with a maximum length of two (2) pages. The SOPs are to be mounted, laminated and then posted near the appropriate equipment or control panel. Two (2) additional copies of the SOPs will be filed in the Plant Operations office, and a copy included in the appropriate O&M manual. Copies of the electronic files (both text and graphics) used to produce the SOPs will be turned over to the PM-JV. The software is to be compatible with existing County software and if not, the FDE will supply additional copies of the software to the County.

Both of these documents will be developed in accordance with the existing manuals and guides (examples are available for the FDE's review).

Add/remove equipment associated with this project on the Plant's Equipment Asset Inventory database.

Two (2) additional copies of the SOP's shall be included in the appropriate O&M Manual. Copies of the electronic files (both text and graphics) used to produce the SOPs will be turned over to the County. The software is to be compatible with existing County software and if not, the FDE will supply additional copies to the County.

D. Division E - Facility Start-Up, Staffing and Training Services

Under this division of work the FDE shall provide the following services:

1. Start-Up Services.
    a. The FDE shall conduct start-up services during construction and shall continue until initiation of the one (1) year project performance period. The following

detailed breakdown delineates the specific elements of the services associated with the Raw Sewage Pumping System Improvements.

b. Scheduling. The FDE, in conjunction with the County and PM-JV, shall develop an overall start-up sequencing schedule that will define in detail significant start-up activities. The overall start-up sequencing schedule shall be coordinated with the County and Construction Contractors and updated as necessary.

c. Start-Up Assistance. The FDE shall provide expert on-site start-up assistance prior to and during initial flow-through for the process units. Start-up assistance during the first year of operation will be provided on a reasonable "on-call" basis for troubleshooting, debugging, cost-effective process optimization, and general startup supervision. Services to be provided include:

d. Strategic Start-Up Plan. This plan is designed to delineate major and minor events expected when placing into operation equipment installed in connection with the Raw Sewage Pumping System Improvements. The Start-up Plan shall identify specific plant components and unit processes that will affect each other and establish a network of related steps that will lead to a logical and smooth start-up. The strategic Start-up Plan shall also define the roles and responsibilities of the participants (County, FDE and construction FDEs). This plan shall be reviewed with the County. Emphasis throughout the start-up will be on the O&M responsibilities of the plant staff to ensure protection of equipment warranties.

e. Establish Process Parameters. The FDE shall review the process design and process operational parameters and establish start-up procedures for each unit process. Start-up procedures shall contain complete information pertaining to control of the equipment and process trains associated with the Raw Sewage Pumping System Improvements.

f. Checklists, Logs, Records and Reports. Although various checklists and plant operating logs are in use, the FDE shall, if necessary, upgrade the system by reviewing existing shift checklists, operating logs, records and reports for all processes affected by the inclusion of the Raw Sewage Pumping System Improvements. The FDE shall provide recommendations for upgrading existing record-keeping, checklists and logs for all components associated with these systems and develop new checklists and logs for new or modified plant processes.

g. Troubleshooting and Debugging. It is anticipated that equipment problems will arise during and following start-up. The FDE shall provide assistance to address problems encountered by the County during the project performance period, analyze these problems and develop solutions that will minimize the overall effects on plant personnel and processes.

h. Process Optimization. The FDE shall provide operations start-up assistance to ensure that steps are taken to adjust and "fine tune" the processes and associated equipment once they have been started up and stabilized.

2. Training Services.

a. The FDE, in conjunction with the County and PM-JV, shall assist in the coordination of manufacturer's training for all new components of the Raw Sewage Pumping System Improvements. This training shall be geared toward the following areas:

i. Process theory/process control.

ii. Mechanical, electrical, instrumentation and HVAC component function and interface.
iii. Preventative/corrective maintenance.
iv. Safety.
v. Laboratory training.
vi. "Hands-on" training.

b. This training shall be coordinated with the County's on-going training program. Any materials developed shall be turned over to the County for future use and reference.

c. General training shall be given during the construction period prior to start-up. Supplemental training, if deemed necessary by the County as a result of process modifications during the one-year performance period, shall be provided by the FDE and given prior to the conclusion of the one-year performance period, and shall incorporate any adjustments in the process resulting from operational experience.

3. One (1) Year Project Operating Report.

a. The FDE shall monitor the performance of the facilities installed for the first year of operation and provide documentation to report on the capability of the project of meeting the overall performance criteria. One (1) year after the initiation of operation of the systems, the FDE shall prepare an evaluation of the Raw Sewage Pumping System Improvements for review and acceptance by the County, if required by the Commissioner. In the event that the improvements do not operate as planned, a report defining the problem and corrective work necessary will be prepared.

APPENDIX A1
FINAL DESIGN ENGINEER'S ASSUMPTION OF PROFESSIONAL LIABILITY

As part of its services to the County, the FDE shall review the PM-JV's preliminary design documents and submit to the PM-JV and County one of the following: 1) Unconditional written acceptance of the PM-JV's preliminary design documents, or 2) Detailed, written comments taking exception to specific elements of the preliminary design presented in the PM-JV's preliminary design documents.

In the event of the latter alternative (written exceptions to the preliminary design), the FDE's comments shall be detailed and present a clear technical case, based on generally-accepted engineering and physical principles, indicating the specific reasons for such exceptions. A technical memorandum shall be included with the comments.

FDE's total design fee presented in the payment schedule shall include performing the review of the preliminary design documents, preparing and submitting written comments/exceptions, and two meetings with the PM-JV regarding the preliminary design documents. Meetings will be at a location mutually acceptable to the FDE, County and PM-JV. If required, the FDE shall make revisions to the preliminary design documents, including issuance of a written amendment to the preliminary design documents, if appropriate.

Ultimately the conclusion of such efforts shall be the FDE's written, unconditional acceptance of the preliminary design documents. After the FDE has furnished written acceptance of the preliminary design documents, the FDE shall be the design professional in responsible charge for the assignment in accordance with applicable laws and regulations, including New York State laws and regulations pertaining to the practice of professional engineering (including, but not limited to, the Rules of the New York State Board of Regents, Part 29.3, Paragraph a.3). Accordingly, FDE shall have sole and complete professional liability and responsibility for the assignment and entire project, including the preliminary design documents as finalized.

APPENDIX B
PAYMENT SCHEDULE

Payment to the FDE for all services as outlined in "Appendix A," including any extra services that may be authorized under this Agreement, shall be made as follows:

Detailed Design (Division B) & Construction Related Services (Division C, D &E) – The FDE shall be paid a fee equal to a percentage of the net total cost of construction exclusive of Extra Services and Reimbursable expenses to cover all costs associated with all work to complete Divisions B, C, D, and E as outlined in the appropriate sections of Appendix A. The percentage of construction cost for the total project let will be determined by a straight line interpolation between the limits of construction as delineated as follows:

NET CONSTRUCTION COST	DESIGN FEE PERCENTAGE
$ 23,600,000 and above	4.2 %
$ 21,100,000	4.7%
$ 18,600,000	5.3%
$ 16,100,000	6.2%
$ 13,600,000 and Below	7.3%

An initial estimated construction cost of **$ 18,600,000** will be used as the basis for progress payments. Interim adjustments to the estimated construction costs, as mutually agreed upon by the parties with the approval of the Commissioner, shall be used to determine the payments to the Contractor.

For the design and construction phases, including the construction administration phase (Division B, C, D & E), the FDE's fee shall be payable as follows:

Phase of Work	% of Fee
Detailed Design	45%
General Inspection Services	35%
Facility Operation and Maintenance Manual	10%
Facility Start-Up, Staffing and Training Services	10%

Partial Payments - The FDE's fee for services shall be paid in monthly installments. The amount of each partial monthly payment shall be determined by the portion of the Contractor's work completed for each Division, as approved by the Commissioner.

Overtime - Payment vouchers which include overtime shall not be approved by the Department without the Contractor having obtained prior written approval of the Department for such overtime. The premium pay for overtime, above the straight hourly rate shall not be subject to any multiplier. In computing the cost to the County for overtime work performed, the overtime period shall be paid at the straight hourly rate times the applicable multiplier, plus the overtime premium cost incurred.

Construction Costs - It is agreed that the total cost of construction shall be the final total cost of the construction contract, including extra change order amounts, except that, in computing the cost of construction the following items shall not be included:

1. Fees paid to the Contractor, subcontractors or construction engineers, cost of land acquisition or legal fees and the cost of equipment purchased outside of the construction contracts.
2. The cost of any and all change orders required by reason of the failure of the Contractor to include such change order items in the contract documents, or by reason of errors made by the Contractor in the preparation of the contract documents.
3. Moneys paid by the County to a contractor or subcontractor by way of settlement or satisfaction of any claims or legal actions for delay brought against the County.
4. Work for which the Contractor has already been paid such as "Extra Work."

In the event the Contractor's services result in change order "Credits" to the County, such credit amounts shall not be deducted from the final cost of construction. It is the intention of the parties that the Contractor shall be compensated for services rendered, notwithstanding that such services may result in a change order credit which reduces the final cost of construction.

If in the further event the credit change order requires the Contractor to perform additional services, then, subject to the approval of the Commissioner, the Contractor shall be paid for such services pursuant to the subsection entitled "Extra Services or Additional Costs," herein.

If the total amount of the lowest responsible construction bids should exceed the final approved estimated construction cost by more than fifteen (15) percent, the County may require the Contractor to revise the plans, at no additional cost to the County, so as to stay within the final approved estimated cost of the construction.

If the award of the construction contract(s) is not made prior to the expiration or termination of this Agreement, then with respect to payment for the Division B, C, D and E services, instead of being paid based on the total cost of construction as outlined above, the Contractor shall be paid a fair and reasonable amount based on services actually rendered as mutually agreed by the Department and the Contractor.

Extra Services or Additional Costs - If the Contractor is required to perform extra services, or incurs additional expenses due to substantial changes ordered by the Department, which changes are not due to the fault or negligence of the Contractor; the Contractor shall be compensated for such extra expense and services. Payment terms for any additional services shall be as mutually agreed by the Department and Contractor, as either a lump sum or based on actual salaries of personnel as stipulated herein, and as further defined below. Such extra services are to be provided only after written authorization by the Department.

For any additional services to be paid on actual salaries the Contractor shall be compensated for such extra services by an amount equal to two and seventy-five hundredths (2.75) times the actual salaries or wages paid to the technical personnel engaged in this phase of the work, exclusive of payroll taxes, insurance, and any and all fringe benefits. The Contractor shall be compensated for such services performed by principals while engaging in a technical capacity in the project, based on the principal's hourly rate, times two and seventy-five hundredths (2.75), exclusive of payroll taxes, insurance and any and all fringe benefits. Notwithstanding the foregoing, the maximum billable rate, after application of the multiplier, shall not exceed one **hundred seventy five dollars** ($175) per hour.

Appendix "EE"

Equal Employment Opportunities for Minorities and Women

The provisions of this Appendix EE are hereby made a part of the document to which it is attached.

The Contractor shall comply with all federal, State and local statutory and constitutional anti-discrimination provisions. In addition, Local Law No. 14-2002, entitled "Participation by Minority Group Members and Women in Nassau County Contracts," governs all County Contracts as defined herein and solicitations for bids or proposals for County Contracts. In accordance with Local Law 14-2002:

(a) The Contractor shall not discriminate against employees or applicants for employment because of race, creed, color, national origin, sex, age, disability or marital status in recruitment, employment, job assignments, promotions, upgradings, demotions, transfers, layoffs, terminations, and rates of pay or other forms of compensation. The Contractor will undertake or continue existing programs related to recruitment, employment, job assignments, promotions, upgradings, transfers, and rates of pay or other forms of compensation to ensure that minority group members and women are afforded equal employment opportunities without discrimination.

(b) At the request of the County contracting agency, the Contractor shall request each employment agency, labor union, or authorized representative of workers with which it has a collective bargaining or other agreement or understanding, to furnish a written statement that such employment agency, union, or representative will not discriminate on the basis of race, creed, color, national origin, sex, age, disability, or marital status and that such employment agency, labor union, or representative will affirmatively cooperate in the implementation of the Contractor's obligations herein.

(c) The Contractor shall state, in all solicitations or advertisements for employees, that, in the performance of the County Contract, all qualified applicants will be afforded equal employment opportunities without discrimination because of race, creed, color, national origin, sex, age, disability or marital status.

(d) The Contractor shall make best efforts to solicit active participation by certified minority or women-owned business enterprises ("Certified M/WBEs") as defined in Section 101 of Local Law No. 14-2002, for the purpose of granting of Subcontracts.

(e) The Contractor shall, in its advertisements and solicitations for Subcontractors, indicate its interest in receiving bids from Certified M/WBEs and the requirement that Subcontractors must be equal opportunity employers.

(f) Contractors must notify and receive approval from the respective Department Head prior to issuing any Subcontracts and, at the time of requesting such authorization, must submit a signed Best Efforts Checklist.

(g) Contractors for projects under the supervision of the County's Department of Public Works shall also submit a utilization plan listing all proposed Subcontractors so that, to the greatest extent feasible, all Subcontractors will be approved prior to commencement of work. Any additions or changes to the list of subcontractors under the utilization plan shall be approved by the Commissioner of the Department of Public Works when made. A copy of the utilization plan any additions or changes thereto shall be submitted by the Contractor to the Office of Minority Affairs simultaneously with the submission to the Department of Public Works.

(h) At any time after Subcontractor approval has been requested and prior to being granted, the contracting agency may require the Contractor to submit Documentation Demonstrating Best Efforts to Obtain Certified Minority or Women-owned Business Enterprises. In addition, the contracting agency may require the Contractor to submit such documentation at any time after Subcontractor approval when the contracting agency has reasonable cause to believe that the existing Best Efforts Checklist may be inaccurate. Within ten working days (10) of any such request by the contracting agency, the Contractor must submit Documentation.

(i) In the case where a request is made by the contracting agency or a Deputy County Executive acting on behalf of the contracting agency, the Contractor must, within two (2) working days of such request,

submit evidence to demonstrate that it employed Best Efforts to obtain Certified M/WBE participation through proper documentation.

(j) Award of a County Contract alone shall not be deemed or interpreted as approval of all Contractor's Subcontracts and Contractor's fulfillment of Best Efforts to obtain participation by Certified M/WBEs.

(k) A Contractor shall maintain Documentation Demonstrating Best Efforts to Obtain Certified Minority or Women-owned Business Enterprises for a period of six (6) years. Failure to maintain such records shall be deemed failure to make Best Efforts to comply with this Appendix EE, evidence of false certification as M/WBE compliant or considered breach of the County Contract.

(l) The Contractor shall be bound by the provisions of Section 109 of Local Law No. 14-2002 providing for enforcement of violations as follows:

a. Upon receipt by the Executive Director of a complaint from a contracting agency that a County Contractor has failed to comply with the provisions of Local Law No. 14-2002, this Appendix EE or any other contractual provisions included in furtherance of Local Law No. 14-2002, the Executive Director will try to resolve the matter.

b. If efforts to resolve such matter to the satisfaction of all parties are unsuccessful, the Executive Director shall refer the matter, within thirty days (30) of receipt of the complaint, to the American Arbitration Association for proceeding thereon.

c. Upon conclusion of the arbitration proceedings, the arbitrator shall submit to the Executive Director his recommendations regarding the imposition of sanctions, fines or penalties. The Executive Director shall either (i) adopt the recommendation of the arbitrator (ii) determine that no sanctions, fines or penalties should be imposed or (iii) modify the recommendation of the arbitrator, provided that such modification shall not expand upon any sanction recommended or impose any new sanction, or increase the amount of any recommended fine or penalty. The Executive Director, within ten days (10) of receipt of the arbitrators award and recommendations, shall file a determination of such matter and shall cause a copy of such determination to be served upon the respondent by personal service or by certified mail return receipt requested. The award of the arbitrator, and the fines and penalties imposed by the Executive Director, shall be final determinations and may only be vacated or modified as provided in the civil practice law and rules ("CPLR").

(m) The contractor shall provide contracting agency with information regarding all subcontracts awarded under any County Contract, including the amount of compensation paid to each Subcontractor and shall complete all forms provided by the Executive Director or the Department Head relating to subcontractor utilization and efforts to obtain M/WBE participation.

Failure to comply with provisions (a) through (m) above, as ultimately determined by the Executive Director, shall be a material breach of the contract constituting grounds for immediate termination. Once a final determination of failure to comply has been reached by the Executive Director, the determination of whether to terminate a contract shall rest with the Deputy County Executive with oversight responsibility for the contracting agency.

Provisions (a), (b) and (c) shall not be binding upon Contractors or Subcontractors in the performance of work or the provision of services or any other activity that are unrelated, separate, or distinct from the County Contract as expressed by its terms.

The requirements of the provisions (a), (b) and (c) shall not apply to any employment or application for employment outside of this County or solicitations or advertisements therefor or any existing programs of affirmative action regarding employment outside of this County and the effect of contract provisions required by these provisions (a), (b) and (c) shall be so limited.

The Contractor shall include provisions (a), (b) and (c) in every Subcontract in such a manner that these provisions shall be binding upon each Subcontractor as to work in connection with the County Contract.

As used in this Appendix EE the term "Best Efforts Checklist" shall mean a list signed by the Contractor, listing the procedures it has undertaken to procure Subcontractors in accordance with this Appendix EE.

As used in this Appendix EE the term "County Contract" shall mean (i) a written agreement or purchase order instrument, providing for a total expenditure in excess of twenty-five thousand dollars ($25,000), whereby a County contracting agency is committed to expend or does expend funds in return for labor, services, supplies, equipment, materials or any combination of the foregoing, to be performed for, or rendered or furnished to the County; or (ii) a written agreement in excess of one hundred thousand dollars ($100,000), whereby a County contracting agency is committed to expend or does expend funds for the acquisition, construction, demolition, replacement, major repair or renovation of real property and improvements thereon. However, the term "County Contract" does not include agreements or orders for the following services: banking services, insurance policies or contracts, or contracts with a County contracting agency for the sale of bonds, notes or other securities.

As used in this Appendix EE the term "County Contractor" means an individual, business enterprise, including sole proprietorship, partnership, corporation, not-for-profit corporation, or any other person or entity other than the County, whether a contractor, licensor, licensee or any other party, that is (i) a party to a County Contract, (ii) a bidder in connection with the award of a County Contract, or (iii) a proposed party to a County Contract, but shall not include any Subcontractor.

As used in this Appendix EE the term "County Contractor" shall mean a person or FDE who will manage and be responsible for an entire contracted project.

As used in this Appendix EE "Documentation Demonstrating Best Efforts to Obtain Certified Minority or Women-owned Business Enterprises" shall include, but is not limited to the following:

a. Proof of having advertised for bids, where appropriate, in minority publications, trade newspapers/notices and magazines, trade and union publications, and publications of general circulation in Nassau County and surrounding areas or having verbally solicited M/WBEs whom the County Contractor reasonably believed might have the qualifications to do the work. A copy of the advertisement, if used, shall be included to demonstrate that it contained language indicating that the County Contractor welcomed bids and quotes from M/WBE Subcontractors. In addition, proof of the date(s) any such advertisements appeared must be included in the Best Effort Documentation. If verbal solicitation is used, a County Contractor's affidavit with a notary's signature and stamp shall be required as part of the documentation.

b. Proof of having provided reasonable time for M/WBE Subcontractors to respond to bid opportunities according to industry norms and standards. A chart outlining the schedule/time frame used to obtain bids from M/WBEs is suggested to be included with the Best Effort Documentation

c. Proof or affidavit of follow-up of telephone calls with potential M/WBE subcontractors encouraging their participation. Telephone logs indicating such action can be included with the Best Effort Documentation

d. Proof or affidavit that M/WBE Subcontractors were allowed to review bid specifications, blue prints and all other bid/RFP related items at no charge to the M/WBEs, other than reasonable documentation costs incurred by the County Contractor that are passed onto the M/WBE.

e. Proof or affidavit that sufficient time prior to making award was allowed for M/WBEs to participate effectively, to the extent practicable given the timeframe of the County Contract.

f. Proof or affidavit that negotiations were held in good faith with interested M/WBEs, and that M/WBEs were not rejected as unqualified or unacceptable without sound business reasons based on (1) a thorough investigation of M/WBE qualifications and capabilities reviewed against industry custom and standards and (2) cost of performance The basis for rejecting any M/WBE deemed unqualified by the County Contractor shall be included in the Best Effort Documentation

g. If an M/WBE is rejected based on cost, the County Contractor must submit a list of all sub-bidders for each item of work solicited and their bid prices for the work.

h. The conditions of performance expected of subcontractors by the County Contractor must also be included with the Best Effort Documentation

i. County Contractors may include any other type of documentation they feel necessary to further demonstrate their Best Efforts regarding their bid documents.

As used in this Appendix EE the term "Executive Director" shall mean the Executive Director of the Nassau County Office of Minority Affairs; provided, however, that Executive Director shall include a designee of the Executive Director except in the case of final determinations issued pursuant to Section (a) through (l) of these rules.

As used in this Appendix EE the term "Subcontract" shall mean an agreement consisting of part or parts of the contracted work of the County Contractor.

As used in this Appendix EE, the term "Subcontractor" shall mean a person or FDE who performs part or parts of the contracted work of a prime contractor providing services, including construction services, to the County pursuant to a county contract. Subcontractor shall include a person or FDE that provides labor, professional or other services, materials or supplies to a prime contractor that are necessary for the prime contractor to fulfill its obligations to provide services to the County pursuant to a county contract. Subcontractor shall not include a supplier of materials to a contractor who has contracted to provide goods but no services to the County, nor a supplier of incidental materials to a contractor, such as office supplies, tools and other items of nominal cost that are utilized in the performance of a service contract.
Provisions requiring contractors to retain or submit documentation of best efforts to utilize certified subcontractors and requiring Department head approval prior to subcontracting shall not apply to inter-governmental agreements. In addition, the tracking of expenditures of County dollars by not-for-profit corporations, other municipalities, States, or the federal government is not required.

APPENDIX "L"

Certificate of Compliance

In compliance with Local Law 1-2006, as amended (the "Law"), the Contractor hereby certifies the following:

1. The chief executive officer of the Contractor is:

   FREDERICK WERNER (Name)
   605 THIRD AVE, NY, NY 10158 (Address)
   212-973-2900 (Telephone Number)

2. The Contractor agrees to either (1) comply with the requirements of the Nassau County Living Wage Law or (2) as applicable, obtain a waiver of the requirements of the Law pursuant to section 9 of the Law. In the event that the contractor does not comply with the requirements of the Law or obtain a waiver of the requirements of the Law, and such contractor establishes to the satisfaction of the Department that at the time of execution of this agreement, it had a reasonable certainty that it would receive such waiver based on the Law and Rules pertaining to waivers, the County will agree to terminate the contract without imposing costs or seeking damages against the Contractor

3. In the past five years, Contractor _____ has ✓ has not been found by a court or a government agency to have violated federal, state, or local laws regulating payment of wages or benefits, labor relations, or occupational safety and health. If a violation has been assessed against the Contractor, describe below:

4. In the past five years, an administrative proceeding, investigation, or government body-initiated judicial action has ✓ has not been commenced against or relating to the Contractor in connection with federal, state, or local laws regulating payment of wages or benefits, labor relations, or occupational safety and health. If such a proceeding, action, or investigation has been commenced, describe below:

5. Contractor agrees to permit access to work sites and relevant payroll records by authorized County representatives for the purpose of monitoring compliance with the Living Wage Law and investigating employee complaints of noncompliance.

I hereby certify that I have read the foregoing statement and, to the best of my knowledge and belief, it is true, correct and complete. Any statement or representation made herein shall be accurate and true as of the date stated below.

11/22/15
Dated

Signature of ~~Chief Executive Officer~~ VP & SECRETARY

ROBERT DRUIN
Name of ~~Chief Executive Officer~~ VP & SECRETARY

Sworn to before me this
23rd day of Nov 2015

~~Notary Public~~

EILEEN KARKIS
Notary Public, State of New York
No. 01KA6003420
Qualified in Kings County
Commission Expires April 10, 2018

APPENDIX G

NY State Revolving Fund
MWBE / EEO / AIS
Bid Packet for

Non-Construction Contracts

Effective October 1, 2014

New York State Environmental Facilities Corporation
625 Broadway, Albany, NY 12207-2997
(800) 882 9721
P: (518) 402-7396 F: (518) 402-7456
www.efc.ny.gov

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BID PACKET FOR NON-CONSTRUCTION CONTRACTS

NEW YORK CLEAN WATER and DRINKING WATER STATE REVOLVING FUNDS

Administered by the New York State Environmental Facilities Corporation (EFC)

"Non-Construction Contracts" means any written agreement, and amendment(s) thereto, where the recipient is committed to expend or does expend funds in return for labor, services (including legal, financial, technical, and other professional services), travel, supplies, equipment, materials or any combination of the foregoing, to be performed for, or rendered or furnished to the contracting agency.

Contents of Bid Packet

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The required contract language to be inserted into all non-construction contracts to satisfy Equal Employment Opportunity (EEO), Disadvantaged Business Enterprise (DBE), Minority & Women Owned Business Enterprise (MWBE), American Iron and Steel (AIS) and some other Clean/Drinking Water State Revolving Fund (SRF) Program requirements

Part 2: GUIDANCE MATERIALS 12

A description of the program requirements as they relate to non-construction contracts funded in whole or in part by the New York State Revolving Funds – all contracts and subcontracts.

Checklists summarizing important required forms or steps to be completed by the Contractor are included at the end of this section.

Part 3: REQUIRED FORMS 32

Copies of required forms are included at the end of this packet for the Service Provider's use. All forms can be found on the EFC website (www.efc.gov).

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PART 1:

REQUIRED CONTRACT LANGUAGE

This Part 1 is to be inserted in its entirety for ALL non-construction contracts and subcontracts funded in whole or in part with SRF funds.

Check EFC's website (www.efc.ny.gov) for updates.

Please note that the contractual language in its entirety is not necessarily applicable to all projects. Information is provided in parentheses below each program section within to identify circumstances when certain language is not applicable.

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REQUIRED TERMS FOR PROJECT CONTRACTS AND SUBCONTRACTS

(Applies to all contracts)

In accordance with the terms and conditions set forth in Section 5.1 of the Project Finance Agreement, Recipient agrees that the following language will be included in all contracts and subcontracts regarding the Project including but not limited to those relating to construction, engineering, architectural, legal and fiscal services, as required by federal and state laws, regulations, and executive orders applicable to this Project:

Defined Terms:

The term "Bid Packets" means the New York State Revolving Fund (SRF) Bid Packet for Construction Contracts and Bid Packet for Non-Construction Contracts and Service Providers, available at www.efc.ny.gov/.

The term "Service Providers" means those who provide the following: legal, engineering, financial advisory, technical, or other professional services; supplies, commodities, equipment, materials, and travel.

The term "subcontractor", as used in this contract or subcontract, means, and applies to, any individual or business enterprise that has an agreement, purchase order, or any other contractual arrangement with a Service Provider.

The term "EEO policy statement" means a statement of the Service Provider and subcontractor setting forth at least the following:

(i) A statement that the Service Provider will provide for and promote equal employment opportunity free of discrimination and harassment against any person on the basis of race, color, national origin, age, disability, sex, gender, sexual orientation, religion, genetic characteristics or information, status as a victim of domestic violence, veteran or military status, marital or family status, or any other discrimination prohibited by law, and will undertake or continue existing programs of affirmative action to ensure that minority group members and women are afforded equal employment opportunities without discrimination and will make and document its conscientious and active efforts to employ and utilize minority group members and women in its work force on contracts relating to the Project.

(ii) An agreement that all of Service Provider's solicitations or advertisements for employees will state that, in the performance of the contract relating to this Project, all qualified applicants will be provided with equal employment opportunity free of discrimination and harassment against any person on the basis of race, color, national origin, age, disability, sex, gender, sexual orientation, religion, genetic characteristics or information, status as a victim of domestic violence, veteran or military status, marital or family status, or any other discrimination prohibited by law.

(iii) An agreement to request each employment agency, labor union, or authorized representative of workers with which it has a collective bargaining or other agreement or understanding, to furnish a written statement that such employment agency, labor union, or representative will not discriminate or harass on the basis of race, color, national origin, age, disability, sex, gender, sexual orientation, religion, genetic characteristics or information, status as a victim of domestic violence, veteran or military status, marital or family status, or any other discrimination prohibited by law and that such union or representative will affirmatively cooperate in the implementation of the Service Provider's obligations herein.

(iv) An agreement to comply with the provisions of the Human Rights Law (Article 15 of the Executive Law), including those relating to non-discrimination on the basis of prior criminal conviction and prior arrest, and with all other State and federal statutory constitutional non-discrimination provisions.

The term "EFC" means the New York State Environmental Facilities Corporation.

The term "EPA" means the United States Environmental Protection Agency.

The term "ESD" means the Empire State Development Corporation - Division of Minority and Women's

Business Development.

The term "Recipient" means the party, other than EFC, to a grant agreement or a project finance agreement with EFC through which funds for the payment of amounts due hereunder are being paid in whole or in part.

The term "State" means the State of New York.

The term "Treatment Works Project" means a Clean Water Act (CWA) Section 212 project. Examples include new, expanded or rehabilitated wastewater plants; sludge treatment and disposal facilities including biosolids reuse; collector, trunk and interceptor sewers; sewer rehabilitation and infiltration/inflow correction; municipally-owned sewers and treatment capacity for industrial wastewater; combined sewer overflow (CSO) abatement; stormwater resiliency and pollution abatement; energy initiatives, including energy efficiency and on-site power generator for treatment plants and sewer systems; water treatment plant filter backwash and sludge treatment; water efficiency projects, including conservation and reuse of water; septage hauling and marine vessel pump out/treatment facilities; publically-owned water conservation/reuse devices or systems; and security measures for wastewater treatment plants and sewer systems.

The terms "Nonpoint Source Projects" and "Green Infrastructure Project" mean a CWA Section 319 Project. Examples include green infrastructure projects that manage stormwater, such as constructed wetlands, biofilters, porous pavement and green roofs; waterbody restoration including stream bank stabilization and drainage erosion and sediment control; restoration of riparian vegetation, wetlands and other water bodies; land acquisition or conservation easements for water quality protection; stormwater management facilities, such as street sweepers and catch basin vacuum vehicles, sediment traps and basins; and capping and closure of municipal solid waste landfills, landfill reclamation, landfill leachate collection, storage and treatment of landfill gas collection and control systems.

The term "Estuary Management Program Project" means a CWA Section 320 Project. Examples include projects necessary to implement the EPA-approved Estuary Conservation and Management Plans for the New York-New Jersey Harbor; Peconic Bay; and Long Island Sound Estuaries.

EEO AND MWBE LANGAUGE, GOALS AND OTHER PROGRAM REQUIREMENTS

(Applies to all contracts)

Interpretation:

This contract is subject to Article 15-A of the Executive Law (Article 15-A) and 5 NYCRR 140-145 (the Regulations) and shall be considered a State Contract as defined therein. If any of the terms herein conflict with Article 15-A or the Regulations, such law and regulations shall supersede these requirements.

Representations and Acknowledgements of Service Provider:

The Service Provider acknowledges that funds for the payment of amounts due under this contract are being provided in whole or in part subject to the terms and conditions of a grant agreement or a project finance agreement with EFC.

The Service Provider represents that it has submitted an EEO policy statement, an EEO Workforce Staffing Plan for Service Provider (Non-construction) Contracts, and an MWBE Utilization Plan (prime Service Providers only), **prior to the execution of this contract.**

Suspension/Debarment - The Service Provider is not a debarred or suspended party under 2 CFR Part 180, 2 CFR Part 1532 and 40 CFR Part 32. Further, neither the Service Provider nor any of its subcontractors have contracted with, or will contract with, any debarred or suspended party under the foregoing regulations or with any party that has been determined to be ineligible to bid under Section 316 of the Executive Law.

Equal Employment Opportunity (EEO), Affirmative Action, MWBE and Other Covenants:

Service Provider and subcontractor shall comply with all federal and state laws, regulations, and executive

orders applicable to this Project, and shall provide such documentation, including periodic reports, as may be requested from time to time and as set forth in guidance documentation available at www.efc.ny.gov/, including but not limited to the Bid Packets.

With respect to this contract, the Service Provider and subcontractor shall undertake or continue existing programs of affirmative action and equal employment opportunity to ensure that minority group members and women are afforded equal employment opportunities without discrimination because of race, color, national origin (including limited English proficiency), age, disability, sex, gender, sexual orientation, religion, genetic characteristics or information, status as a victim of domestic violence, veteran or military status, marital or family status, or any other discrimination prohibited by law. For these purposes, affirmative action shall apply in the areas of recruitment, employment, job assignment, promotion, upgrading, demotion, transfer, layoff, or termination and rates of pay or other forms of compensation.

MWBE PROGRAM

***(Applies to all: (1) Service Provider Contracts greater than $25,000*
(2) Contracts that are initially under this thresholds but subsequent change orders or contract amendments increased the contract value above $25,000
*(3) Change orders greater than $25,000)***

MWBE Goals - The Service Provider agrees to pursue MWBE goals in effect at the time of execution of this contract. The MWBE goals shall be applied to the total amount being funded pursuant to the grant agreement or project finance agreement with EFC.

10/1/2012 – Present	MWBE Combined Goal*
All counties	20%

*May be any combination of MBE and/or WBE participation

Service Provider shall solicit participation of MWBE firms (including subcontractors, consultants and service providers) for SRF-funded projects in accordance with the aforementioned goals. The Service Provider must submit sufficient documentation to demonstrate good faith efforts to provide opportunities for MWBE participation for work related to the SRF-funded project in the event respective goals are not achieved. Guidance pertaining to documentation of good faith efforts is set forth in the Bid Packet.

The Service Provider agrees that for purposes of providing meaningful participation by MWBEs on the contract and achieving the goals, Service Provider will reference the directory of New York State Certified MWBEs found at the following internet address: http://www.ny.newnycontracts.com/.

Subcontractors who in turn subcontract work shall also comply with MWBE requirements for that contract.

MWBE Utilization Plan (MWBE Utilization Plan requirements apply to Service Provider. MWBE Utilization Plans are submitted to the SRF Recipient's minority business officer (MBO) prior to execution of a contract.) – Each Service Provider shall prepare an MWBE Utilization Plan, and any subsequent revisions or amendments thereto, that provides information describing MBEs and WBEs to be utilized at various times during the performance of this contract. The MWBE Utilization Plan shall identify the Service Provider's proposed MBE and WBE utilization for this contract and the MWBE participation goals established for this contract by EFC. The MBEs and WBEs identified in the MWBE Utilization Plan must be certified by, or have applied, for certification from ESD.

In the event that the Service Provider's approved MWBE Utilization Plan does not propose achievement of the MWBE participation goals for this contract, the Service Provider shall complete a waiver request as hereinafter referenced.

Submission – Within 30 days of execution of this contract, the Service Provider shall submit to the Recipient copies of all signed subcontracts, agreements, and/or purchase orders referred to in the MWBE Utilization Plan.

Compliance – The Service Provider agrees to adhere to its approved MWBE Utilization Plan for the participation of MWBEs on this contract pursuant to their respective MWBE goals.

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Waivers – If the Service Provider's application of good faith efforts does not result in the utilization of MBE and/or WBE firms to achieve the aforementioned goals then, prior to execution of a contract, the Service Provider shall complete the waiver request portion of the MWBE Utilization Plan and submit it to the Recipient. The Service Provider is entitled to receive a written notice of acceptance or denial within 20 days of receipt. Upon receipt of a notice of deficiency from the Recipient, the Service Provider shall respond with a written remedy to such notice within 7 days. Such response may include a request for a total or partial waiver of the aforementioned goals.

The Service Provider shall comply with the requirements set forth in the Bid Packets regarding waivers.

Required Reports – MWBE Monthly Report – The Service Provider agrees to submit a report to the Recipient by the 3rd business day following the end of each month over the term of this contract documenting the payment made and the progress towards achievement of the MWBE goals of this contract.

EEO PROGRAM

(Applies to all Service Provider Contracts and Subcontracts)

EEO Workforce Staffing Plan

All Service Providers and their subcontractors shall submit an acceptable EEO Workforce Staffing Plan setting forth the anticipated work force to be utilized on such contract or, where required, information on the Service Provider's total work force, including apprentices, broken down by specific ethnic background, gender and Federal occupational categories or other appropriate categories specified by the Recipient. The EEO Workforce Staffing Plan is submitted to the Recipient prior to execution of a contract.

Required Reports - EEO Workforce Utilization Reports

During the term of this contract, the Service Provider and subcontractor shall update and provide notice to the Recipient of any changes to the previously submitted Staffing Plan in the form of an EEO Workforce Utilization Report. The Service Provider shall submit this information on a quarterly basis during the term of this contract to report the actual workforce utilized in the performance of the contract by the specified categories listed including ethnic background, gender, and Federal occupational categories. The EEO Workforce Utilization Report must be submitted to report this information. In the event a Service Provider and subcontractor's workforce does not change within the Quarterly period, the Service Provider shall notify the Recipient in writing.

DISADVANTAGED BUSINESS ENTERPRISES

(Applies to all contracts)

The Service Provider and subcontractor shall not discriminate on the basis of race, color, national origin or sex in the performance of this contract. The Service Provider and subcontractor shall carry out applicable requirements of 40 CFR Part 33 in the award and administration of contracts awarded under EPA financial assistance agreements. Failure by the Service Provider and subcontractor to carry out these requirements is a material breach of this contract which may result in the termination of this contract or other legally available remedies. Service Providers and subcontractors shall comply with the requirements set forth in the Bid Packets regarding Disadvantaged Business Enterprises.

REMEDIES

(Applies to all contracts)

Upon a determination by the Recipient of the Service Provider's non-responsiveness, non-responsibility or breach as a result of a failure to comply with the requirements of Article 15-A and the Regulations, the Recipient may withhold funds under this contract or take such other actions, impose liquidated damages or commence enforcement proceedings as set forth herein or as otherwise allowed by law or in equity.

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If the Service Provider or subcontractor fails to submit to Recipient an EEO policy statement consistent with the provisions set forth in clauses (i), (ii), (iii) and (iv) of the definition thereof and within the timeframe required therefor, Recipient may declare this contract to be null and void.

The Service Provider and subcontractor agree that a failure to submit and/or adhere to its EEO policy statement, EEO Workforce Staffing Plan for Service Provider (Non-construction) Contracts, and an MWBE Utilization Plan, and any other required periodic reports, shall constitute a material breach of the terms of this contract, entitling Recipient to any remedy provided herein, including but not limited to, a finding of Service Provider non-responsiveness.

Liquidated or Other Damages - If it has been determined by the Recipient or NYSEFC that the Service Provider is not in compliance with the requirements herein or refuses to comply with such requirements, or if the Service Provider is found to have willfully and intentionally failed to comply with the MWBE participation goals, the Service Provider shall be obligated to pay to Recipient liquidated damages or other appropriate damages as determined by the Recipient or EFC, in accordance with Section 316-a of Article 15-A and 5 NYCRR §142.13

Liquidated damages shall be calculated as an amount not to exceed the difference between:

1. All sums identified for payment to MWBEs had the Service Provider achieved the contractual MWBE goals; and

2. All sums actually paid to MWBEs for work performed or materials supplied under this contract.

In the event a determination has been made by the Recipient or EFC which requires the payment of liquidated damages and such identified sums have not been withheld, the Service Provider shall pay such liquidated damages to the Recipient within sixty (60) days after they are assessed unless prior to the expiration of such sixtieth day, the Service Provider has filed a complaint with ESD pursuant to Subdivision 8 of Section 313 of the Executive Law in which event the liquidated damages shall be payable if the Director of ESD renders a decision in favor of the Recipient.

RESTRICTIONS ON LOBBYING

(Applies to all contracts greater than $100,000)

The Service Provider and subcontractor executing a contract in excess of $100,000 agree to provide to the Recipient an executed Certification For Contracts, Grants, Loans, and Cooperative Agreements 40 CFR 34, in the form attached hereto, consistent with the requirements of 40 CFR Part 34.

AMERICAN IRON AND STEEL (AIS) REQUIREMENT

(Applies only to Equipment and Material Supplier contracts)

The Service Provider acknowledges to and for the benefit of the Recipient of the Clean Water State Revolving Fund (CWSRF) or the Drinking Water State Revolving Fund (DWSRF) financial assistance ("Purchaser") that the Service Provider understands the goods and services under this Agreement are being funded with monies made available by the New York State Environmental Facilities Corporation (EFC) through the CWSRF or the DWSRF and that such funding is subject to certain statutory restrictions requiring that certain iron and steel products used in the project be produced in the United States ("American Iron and Steel Requirement") including iron and steel products provided by the Service Provider pursuant to this Agreement.

The Service Provider hereby represents and warrants that:

(a) the Service Provider has reviewed and understands the American Iron and Steel Requirement,

(b) all of the iron and steel products covered by the American Iron and Steel Requirement used in

the project will be and/or have been produced in the United States in a manner that complies with the American Iron and Steel Requirement, unless a waiver of the requirement is approved, and

(c) the Service Provider will provide any further verified information, certification or assurance of compliance with this paragraph, or information necessary to support a waiver of the American Iron and Steel Requirement, as may be requested by the Recipient.

Notwithstanding any other provision of this Agreement, any failure to comply with this paragraph by the Service Provider shall permit the Recipient to recover as damages against the Service Provider any loss, expense, or cost (including without limitation attorney's fees) incurred by the Recipient resulting from any such failure (including without limitation any impairment or loss of funding, whether in whole or in part, from the EFC or any damages owed to the EFC by the Recipient). While the Service Provider has no direct contractual privity with the EFC, as a lender to the Recipient for the funding of this project, the Recipient and the Service Provider agree that the EFC is a third-party beneficiary and neither this paragraph (nor any other provision of this Agreement necessary to give this paragraph force or effect) shall be amended or waived without the prior written consent of the EFC.

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PART 2:

GUIDANCE MATERIALS

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APPENDIX G

INTRODUCTION

A description of requirements as they relate to non-construction contracts funded in whole or in part by the New York State Revolving Funds:

Applicability:
This guidance applies to Service Provider (Non-Construction) contracts are written agreements where the SRF recipient (Recipient) commits to expend funds for services (including legal, engineering, financial advisory or other professional services, and labor); supplies; commodities; equipment; materials; and travel, or any combination thereof.

Purpose of Documents:
This guidance is designed to complement the required contract language as set forth in Part 1 – Required Contract Language, by providing additional information intended to assist SRF Recipients and bidders in complying with EEO, MWBE, and other requirements of the SRF programs, including:

- New York State Executive Law, Article 15-A and New York Code of Rules and Regulations, Title 5 (5 NYCRR) Parts 140-145 (Regulations of the Commissioner of Economic Development)
- 40 Code of Federal Regulations (CFR) Part 33 – "Participation by Disadvantaged Business Enterprises in US EPA Programs"
- Restrictions on Lobbying

Service Providers are required to engage in procurement practices that will provide opportunities for meaningful participation of minority and women-owned business enterprises (MWBE) in providing labor, travel, equipment, materials, supplies, services (including legal, financial, engineering or other professional services), or any combination of the above, and practices to encourage the employment of minorities and women in the workforce.

Failure to report on EEO participation or to meet all the requirements of MWBE & DBE regulations in a timely manner may result in withholding of disbursements of SRF funds or other remedies as cited in the SRF financing agreement. This may affect the Service Provider's payments. If this is a project with a not-for-profit entity, please contact EFC for appropriate guidance.

Reference the EFC website to ensure the most recent forms and language. (http://www.efc.ny.gov/)

The New York State Environmental Facilities Corporation (EFC) implements the New York State Revolving Fund (SRF) for both Clean Water and Drinking Water projects. This guidance outlines the activities that must be performed by each Service Provider on an SRF funded project in order to comply with federal and New York State laws and regulations.

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SECTION 1 EQUAL EMPLOYMENT OPPORTUNITY

(Applies to all contracts)

A. WORKFORCE DIVERSITY

Service Providers are required to document their efforts to meet EEO goals for the employment of minorities and women on all SRF funded projects on the EEO Workforce Utilization Report. The United States Department of Labor (DOL) has established EEO goals for employment of minority and women. The goals are available on EFC's website in the Prime Contractor Folder.

B. EEO POLICY STATEMENT

The EEO Policy Statement is documentation of a Service Provider's policy of non-discrimination in accordance with federal and state laws. The EEO Policy Statement must: be submitted to the Recipient's minority business officer (MBO) as part of any bid proposal; include language as defined above (see Required Terms for Project Contracts and Subcontracts – EEO Policy Statement definition); and be signed by each potential bidder.

The EEO Policy Statement can be found in the required forms section of this document and on EFC's website.

C. EEO WORKFORCE STAFFING PLAN

With the Bid, or when offering services, each Service Provider shall submit to the SRF Recipient an EEO Workforce Staffing Plan estimating the anticipated work force to be utilized on the project. The EEO Workforce Staffing Plan shall include information on the Service Provider's total work force, including apprentices, broken down by specific ethnic background, gender and Federal occupational categories.

Blank EEO Workforce Staffing Plans are found in the Required Forms section of this document and on EFC's website.

D. EEO WORKFORCE UTILIZATION REPORTS

Upon the execution of the contract and monthly thereafter, the Service Provider shall submit to the Recipient's MBO an EEO Workforce Utilization Report that documents the actual labor hours worked by ALL Service Provider AND subcontractor employees during the prior month period, on activities related to the contract, broken down by specific ethnic background, gender, and Federal occupational categories or other appropriate categories specified by the Recipient.

The EEO Workforce Utilization Report is part of the MWBE Monthly Report forms. Both the EEO Workforce Utilization Report and MWBE Monthly Report are found on the EFC website in the Prime Contractor folder.

All EEO Workforce Utilization Reports submitted by the Service Provider and subcontractor must reflect a separation of the workforce utilized in the performance of this contract from the Service Provider or subcontractor's total workforce. The EEO Workforce Utilization Report must indicate that the information provided relates to the actual workforce utilized. If the Service Provider or subcontractor fails to separate the workforce to be utilized on this contract from the total workforce as determined by Recipient, the Service Provider shall submit the EEO Workforce Utilization Report and indicate that the information provided is the Service Provider or subcontractor's total workforce during the subject time frame, not limited to work specifically under a particular contract.

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SECTION 2 MINORITY & WOMEN-OWNED BUSINESS ENTERPRISE and DISADVANTAGED BUSINESS ENTERPRISE

***(DBE Applies to all contracts*

MWBE Applies to all: (1) Service Provider Contracts greater than $25,000
(2) Projects that are initially under this thresholds but subsequent contract amendments increased the contract value above $25,000
*(3) Change orders greater than $25,000)***

A. MWBE REQUIREMENTS

Recipients, Service Provider and subcontractors must comply with New York State Executive Law, Article 15-A and New York Code of Rules and Regulations, Title 5 (5 NYCRR) Parts 140-145 (Regulations of the Commissioner of Economic Development).

Non-construction contracts, for the purposes of SRF MWBE compliance, are written agreements between an SRF Recipient and a Service Provider (or subcontractor) whereby the SRF Recipient commits to expend funds for the services (i.e. legal, engineering, financial advisory or other professional services, and labor); supplies; commodities; equipment; materials; and travel, or combination thereof in support of an SRF financed project.

Amendments or change orders for such non-construction contracts with a value greater than $25,000 may be subject to MWBE requirements as well. The Service Provider is to seek additional MWBE participation for the additional value of the contract unless EFC determines otherwise.

If contracts with a value of $25,000 or less have subsequent change orders or amendments that bring the total contract value to greater than $25,000, the full value of the contract will then be subject to MWBE requirements.

B. MWBE PARTICIPATION GOALS (FAIR SHARE OBJECTIVES)

Based on the report, "The State of Minority and Women-Owned Business Enterprise: Evidence of New York, April 29, 2010" (NYS Disparity Study), there is a demonstrated availability of MWBEs throughout New York State. Service Providers are required to solicit participation of MWBE firms (including subcontractors, consultants, and service providers) for SRF funded projects.

MWBE participation goals will be based on the execution date of each respective contract, unless MWBE participation goals have been otherwise specified in an executed SRF grant agreement or project finance agreement.

10/1/2012 – Present	MWBE Combined Goal*
All counties	20%

*May be any combination of MBE and/or WBE participation

10/1/2011 – 9/30/2012	MWBE Combined Goal*
All counties	10%

*May be any combination of MBE and/or WBE participation

10/13/2010 – 9/30/2011	MBE Goals	WBE Goals
All other counties non-NYC	8.8%	8.8%
New York City and Long Island Region (Bronx, Brooklyn, Manhattan, Queens, Staten Island, Nassau, Suffolk)	18.8%	20.5%

C. RECEIVING CREDIT UNDER THE EFC MWBE PROGRAM

To receive MWBE participation credit, Service Provider that have been identified in an approved MWBE Utilization Plan (See Subsection D1 below for more information) must be certified as an MBE or WBE by the Division of Minority and Women's Business Development, Empire State Development Corporation (ESDC). Conditional credit will be given for firms that have applications

pending with ESDC.

Prime Service Providers that are certified MWBE firms will receive credit for MWBE participation.

A list of firms certified in New York State can be found on the ESD website at http://www.ny.newnycontracts.com. Searches can be performed by the business name and commodity code or business description.

D. NON-CONSTRUCTION CONTRACTOR'S MWBE RESPONSIBILITIES

At the Time of Bid (if applicable):

The completed forms listed below shall be part of the official bid submission by each competing Service Provider:

- **EPA Form 6100-3 "DBE Subcontractor Performance Form"**
  Each potential bidder shall complete this form and submit it to the MBO for each MWBE firm contacted during the bid or proposal preparation process, and make reasonable efforts to obtain signatures from the MBEs and WBEs contacted. This form shall be completed by each potential subcontractor and submitted to the MBO as part of the bid submission.

- **EPA Form 6100-4 "DBE Subcontractor Utilization Form"**
  This form shall be completed by each potential bidder and submitted to the MBO as part of the bid submission. On this form, each bidder offers their estimated plan for MBE and WBE utilization for their contract.

  NOTE: The EEO Policy Statement should be completed and submitted at this time.

Prior to Award of the Contract:

- **EPA Form 6100-2 "DBE Subcontractor Participation Form"**
  Distribute the form to MWBE Subcontractors who are listed on the 6100-4 form. Submit documented proof (e.g. email, letter, certified mail receipt) to the MBO that the 6100-2 form was sent to the MWBE Subcontractors. (See Part 3: Required Forms)

After Award of the Contract:

Each prime Service Provider is obligated to seek MWBE participation and document their good faith efforts to meet MWBE goals.

1. **MWBE Utilization Plan (UP)**

   a. **Due Date:** MWBE UPs are required to be submitted to the MBO no later than the date of execution of the contract.

   b. **Preparation:** Each Service Provider shall prepare an MWBE UP that provides information describing MBEs and WBEs to be utilized during the term of the contract. The MWBE UP will reflect the EFC MWBE goals that apply to the contract as well as the Service Provider's anticipated MWBE participation. The Service Provider will transmit the completed MWBE UP form, with all pages filled out, to the MBO. Blank MWBE UP forms are available on the EFC website.

      MWBE UP revisions should be submitted to the MBO, with the next monthly report. When an MWBE UP is revised due to execution of a change order, the change order should be submitted to the MBO with the revised MWBE UP.

   c. **NYS Certified:** The MBEs and WBEs identified in the MWBE UP must be certified by, or have applied for certification from:
      Empire State Development Corporation
      Division of Minority and Women's Business Development

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625 Broadway
Albany, New York 12245
Phone: 1-800-782-8639
http:///www.ny.newnycontracts.com

d. **Supplier Credit:** Credit for MBE/WBE participation shall be granted for MWBE firms performing a commercially useful business function according to custom and practice in the industry.

"Commercially useful functions" normally include:

i. Providing technical assistance to a purchaser prior to a purchase, during installation, and after the supplies or equipment are placed in service;

ii. Manufacturing or being the first tier below the manufacturer of supplies or equipment; or

iii. Providing functions other than merely accepting and referring requests for supplies or equipment to another party for direct shipment to a Service Provider.

iv. Being responsible for ordering, negotiating price, and determining quality and quantity of materials and supplies.

MBE/WBE goal crediting:

i. For MWBE suppliers who are manufacturers, fabricators, or official manufacturer's representatives who are warehousing such goods, up to 100% of the MBE/WBE objective may be credited.

ii. No credit will be granted for MBEs and/or WBEs that do not provide a commercially useful function

e. **Waiver Request:** If the Service Provider's application of good faith efforts does not result in the utilization of MBE and/or WBE firms to achieve the aforementioned goals or a specialty equipment/service waiver is requested, the Service Provider shall complete the waiver request portion of the MWBE Utilization Plan, attach appropriate documentation, and submit it to the MBO. **See Section F for more information.**

f. **MWBE Utilization Plan Acceptance vs. Notice of Deficiency:** The MBO will evaluate a completed MWBE UP. Upon review and application of the requirements set forth in this guidance, if the MBO finds the UP acceptable, they will forward to EFC for review. If the MBO finds the UP insufficient, they will work with the Service Provider to address deficiencies before submitting to EFC for review. A written notice of acceptance or denial will be issued by EFC within 20 business days of receipt of the UP. Upon notice of deficiency to the Service Provider from either the MBO or EFC, the Service Provider shall respond with a written remedy to such notice within seven (7) business days.

In coordination with the MBO, EFC will accept a UP upon consideration of many factors, including the following:

i. The UP indicates that the MWBE proposed goals for the project will be achieved;

ii. A prime Service Provider, who is a certified MBE or WBE, will be credited for up to 100% of the category of their certification. However, good faith efforts to seek participation in the other category are required;

iii. Adequate documentation to demonstrate good faith effort and/or support a specialty equipment/services waiver as described in Section D2.

g. **UP Acceptance:** Within 10 days of the final acceptance of a MWBE Utilization Plan or Waiver Request, EFC will post the approved MWBE Utilization Plan or Waiver Request on the EFC website.

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h. **Conditional UP:** In coordination with the MBO, EFC may issue conditional acceptance of Utilization Plans pending submission of additional documentation that demonstrates there will be an increase in MWBE participation.

i. **Revisions of the MWBE Utilization Plans:** If project conditions change such that the information submitted in the approved MWBE UP is no longer valid, the Service Provider shall indicate the changes to the MBO in the next monthly report. At EFC's discretion, a completely revised MWBE UP form and good faith effort documentation may be required to be submitted.

j. **Projects Co-Funded with other state/federal agencies**: In the event EFC is providing financial assistance to a project that is also financially supported by other state/federal agencies, EFC may defer to the MBE and WBE participation goals and established by those agencies.

2. **Good Faith Effort Documentation**

Prime Service Providers shall maintain documentation of their efforts to solicit participation of MWBE firms for SRF-funded projects in an effort to meet the appropriate goals. In the event respective goals are not achieved, the Service Provider must submit sufficient documentation to demonstrate good faith efforts have been made to provide opportunities to certified MWBE firms to participate in SRF-funded projects.

Examples of documentation of good faith efforts are set forth below:

- Information on the scope of work related to the contract and specific steps taken to reasonably structure the scope of work to break out tasks or equipment needs for the purpose of providing opportunities for subcontracting with or obtaining supplies or services from MBEs or WBEs.

- Printed screenshots of the directory of Certified Minority and Women Owned Businesses (MWBE directory) on ESD's website on a statewide basis, if appropriate, for both MBEs and WBEs that provide the services or equipment necessary for the contract. Contact the MBO for assistance in performing a proper search including identifying a sufficient number of solicitations to show that good faith effort was made.

- Copies of timely solicitations and documentation that the Service Provider offered relevant plans, specifications, or other related materials to MBE and WBE firms on ESD's MWBE directory to participate in the work, with the responses.

  The Service Provider is to offer sufficient advance notice proportional to the size and complexity of the contract to enable MBEs and WBEs to prepare an informed response to the solicitations for participation as a subcontractor or supplier. The solicitations and responses are required to be documented in a log to be submitted in the case where the goal is not met. The log should consist of the list of MBE and WBE firms solicited, their contact information, the type of work they were solicited to perform (or equipment to provide), how the solicitation was made (fax, phone, email) and the contact information, the contacts name and the outcome. If a bid was received, the bid price should also be included in the log. See a sample log entry below:

Date	M/WBE Type	Company	Scope of work	Contact Name	Phone/ Email	Solicitation Format	MWBE Response	Negotiation Required?	Selected? If not, Explain

If no response was received to an initial solicitation, at least one follow-up solicitation should be made in a different format than the first, e.g. fax followed by phone call. Any bids received from non-MWBE firms should also be tracked on the log.

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Submit the EPA 6100-3 and 6100-4 forms that are required as part of all bids or proposals. A properly completed EPA 6100-3 form is good indication of a contact to an MWBE and their response to the contact. If solicitations do not result in obtaining sufficient participation of MWBE firms due to non-responsiveness, please contact the MBO or EFC MWBE representative for support.

- Copies of any advertisements of sufficient duration to effectively seek participation of certified MBE and WBEs timely published in appropriate general circulation, trade and MWBE oriented publications, together with listing and dates of publication of such advertisements. EFC recommends the use of the Contract Reporter that is free to all Service Providers - https://www.nyscr.ny.gov/. A log should be kept of the responses to the ads, similar to the log for MWBE firm solicitation and should include the non-MWBE firms that responded and the bid prices. Any negotiations should be documented in the log.

- Documents demonstrating that insufficient MBEs or WBEs are reasonably available to perform the work. Based on the NYS Disparity Study, there is a presumption of MBE and WBE statewide availability, unless information is submitted indicating otherwise.

- A written demonstration that the Service Provider offered to make up any inability to meet the project MWBE participation goals in other contracts and/or agreements performed by the Service Providers on another SRF funded project.

- The date of pre-bid, pre-award, or other meetings scheduled by the Recipient, if any, and the contact information of any MBEs and WBEs who attended and are capable of performing work on the project.

- Any other information or documentation that demonstrates the Service Provider conducted good faith efforts to provide opportunities for MWBE participation in their work. For instance, prime Service Provider and MBOs should develop a list of MWBE firms that have expressed interest in working on SRF funded projects

- The use of certified Disadvantaged Business Enterprises (DBE), Small Business Administration (SBA), and Veteran-Owned Small Businesses (VOSB) may be considered as a demonstration of Good Faith Efforts.

3. Subcontract Agreements

The Service Provider shall submit copies of all legally signed subcontracts, agreements, and purchase orders that are referred to in the MWBE Utilization Plan to the MBO within 30 days of their execution. These subcontracts and/or purchase orders must include the following information:

a. Actual dollar amount of the subcontract;

b. A job description of the work to be performed by the subcontractor;

c. Signatures of both parties;

d. Date of execution;

e. MWBE language (included in this bid packet); and

f. A signed EEO Policy Statement Agreement (See Required Forms).

NOTE: Purchase orders must be sent with copies of both sides of cancelled checks.

4. Monthly Reports

The Service Provider must submit monthly MWBE payment reports supplemented with proof of payment to the MBO. Blank monthly report forms are available on EFC's website

or from the MBO. Monthly reports should be submitted to the MBO within 3 business days after the end of each month being reported.

As part of the Monthly Report, the Service Provider must provide documentation to the MBO that subcontractors have been paid within 30 days of receipt of payment from the Recipient.

The final monthly payment report must reflect all Utilization Plan revisions and all change orders.

5. **Other Service Provider Responsibilities**

   a. Continue good faith efforts to seek opportunities for MBE and WBE participation even if proposed goals have been achieved. In addition, any revisions to an MWBE Utilization Plan must be documented in the next monthly report to the MBO for approval.

   b. Provide written notification to the MBO and EFC of any termination of an MBE or WBE subcontractor. This should be reported as part of the revised MWBE Utilization Plan or in a monthly report.

   c. Provide timely and complete responses to inquiries from either the MBO or EFC staff as requested.

   d. Make all MWBE documents and records available upon request to EFC staff, the MBO, or their authorized representatives.

   e. Manage the project in a manner that creates meaningful opportunities for participation by MBEs and WBEs.

   f. Provide programs to ensure that minority group members and women are afforded equal employment opportunities without discrimination on the basis of race, color, national origin (including limited English provision), age, disability, sex, gender, sexual orientation, religion, genetic characteristics or information, status as a victim of domestic violence, veteran or military status, marital or family status, or any other discrimination prohibited by law.

Additional guidance and requirements pertaining to the preparation and submission of the MWBE Utilization Plans can be found in the Part 1: Required Contract Language.

NOTE: Failure by the Service Provider to receive acceptance of the MWBE Utilization Plan by the Recipient or EFC may result in withholding of progress payments. Such withholding of progress payments shall not relieve the Service Provider of any contract requirements including the completion of the project within the specified contract time.

E. SUBCONTRACTOR'S MWBE RESPONSIBILITIES

Subcontractors are those individuals or business enterprises that contract directly with Service Providers. Subcontractors should:

1. Maintain their MWBE certifications, and notify the Service Provider and MBO of any change in their certification status.

2. Respond promptly to solicitation requests by completing and submitting bid information in a timely manner.

3. Maintain business records that should include, but not be limited to, contracts/agreements, records of receipts, correspondence, purchase orders, and canceled checks.

4. Complete and submit the EPA Form 6100-3 "DBE Subcontractor Performance Form" to the Service Provider prior to submission of the bid (if applicable). Provide a receipt of EPA Form 6100-2 "DBE Subcontractor Participation Form" to the Service Provider prior to award of contract.

5. Ensure that a required EEO Policy Statement is included in each subcontract. Additionally, signed versions of each subcontract should be sent to the MBO within 30 days of execution.

6. Provide programs to ensure that minority group members and women are afforded equal employment opportunities without discrimination on the basis of race, color, national origin (including limited English provision), age, disability, sex, gender, sexual orientation, religion, genetic characteristics or information, status as a victim of domestic violence, veteran or military status, marital or family status, or any other discrimination prohibited by law.

7. Notify the MBO and EFC when contract problems arise, such as non-payment for services or when the subcontractor is not employed as described in the MWBE Utilization Plan.

8. Perform the subcontracted scope of work in a professional and timely manner.

F. WAIVER REQUESTS

Each Service Provider is required to create meaningful opportunities for certified MWBE participation and to offer the MWBE certified firms a fair share of their work. After making good faith efforts to create meaningful opportunities, a Service Provider may find that it is not possible to meet the MWBE goals. In that case, the Service Provider shall request a waiver from the goals.

Even if an MWBE waiver is granted, EEO information must still be submitted. The EEO information is submitted as part of the Monthly Report.

1. **Preparation**: The Service Provider shall complete the waiver request portion of the MWBE Utilization Plan and submit it to the MBO along with adequate good faith effort documentation and a letter explaining why the waiver is necessary.
2. **Waiver Review**: The MBO and EFC will review each waiver request based on the good faith effort criteria presented above and the documentation submitted with the waiver request. EFC will not issue any automatic waivers from MWBE responsibilities. A full or partial waiver from the MWBE goals can be requested.
3. **Specialty Equipment/Service Waiver:** A specialty equipment/service waiver may be granted in cases where:

   a. equipment is made by only one non-MWBE manufacturer,

   b. the technical contract specifications call for equipment that is not available through an MWBE supplier;

   c. the equipment is constructed on site by specially trained non-MWBE labor;

   d. the service is not available through an MWBE (such as work done by National Grid);

   e. the service is proprietary in nature (such as use of certain computer software necessary for control systems); or

   f. the service cannot be subcontracted (such as litigation services).

   If the contract includes specialty equipment or services, and documentation is submitted demonstrating that there are no MBE/WBE firms capable of completing this portion of the contract, the specialty amount of the contract may be deducted from the total contract amount to determine the MWBE Eligible Amount and the goals would be applied to the MWBE Eligible Amount. This determination is made at the discretion of the MBO and EFC.

   Example:

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$200,000	- $50,000	=	$150,000
(Contract)	(Specialty equipment/service)		(MWBE Eligible Amount)

The MWBE goal is applied to the remaining balance.

A request for this specialty equipment/service deduction can be completed by filling out section two of the MWBE Utilization Plan and submitting it to the MBO. The request must include a copy of the page from the contract where the equipment/ service is described and the cost of each item. Additional documentation may be requested by the MBO or EFC.

G. PROTESTS/COMPLAINTS

Subcontractors or Service Providers who have any concerns, issues, or complaints regarding the implementation of the SRF MWBE/EEO Program, or wish to protest should do so in writing to the project MBO and EFC. The MBO, in consultation with EFC, will review the circumstances described in the submission, investigate to develop additional information, if warranted, and determine whether action is required. If the subcontractor believes the issue has not been resolved to their satisfaction, they may appeal in writing to EFC for consideration.

H. WASTE, FRAUD AND ABUSE

Subcontractors, contractors, Service Provider, or Recipients who know of or suspect any instances of waste, fraud, or abuse within the MWBE & EEO Program should notify the project MBO and EFC immediately. Additionally, suspected fraud activity should be reported to the EPA – Office of Inspector General Hotline at (888) 546-8740; the New York State Office of Inspector General at (800) 367-4448, or the ESD Compliance Office at (212) 803-3268.

I. REMEDIES

If a Recipient makes a determination that a Service Provider has been non-responsive, is non-responsible, or is in breach as a result of a failure to comply with the program requirements discussed in Part 1: Required Contract Language, Recipient may withhold funds under the contract or take such other actions, impose liquidated damages or commence enforcement proceedings.

If a Service Provider or subcontractor fails to submit to Recipient an EEO policy statement within the required timeframe, Recipient may declare the contract to be null and void.

A failure to submit and/or adhere to an EEO policy statement and an MWBE Utilization Plan, and any other required reports, shall constitute a material breach of the terms of the contract between the Service Provider and Recipient, and justify a finding of Service Provider non-responsiveness.

SECTION 3 RESTRICTIONS ON LOBBYING

(Applies to contracts greater than $100,000)

Each Service Provider and subcontractor which has a contract with Recipient exceeding $100,000 shall provide to the Recipient an executed certification on the form provided, that it will not expend appropriated federal funds to pay any person for influencing or attempting to influence an officer or employee of any agency, Member of Congress, officer or employee of Congress or any employee of any Member of Congress in accordance with the provisions of 40 CFR Part 34, and to maintain such certification for their own records.

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SECTION 4 AIS REQUIREMENTS

(Applies only to Equipment and Materials Supplier contracts)

American Iron and Steel (AIS) requirements apply to any federally funded construction contract that meets all of the following conditions:

- For the construction, alteration, maintenance, or repair of public water system or treatment works;
- That execute a financial assistance agreement with the NYS Environmental Facilities Corporation (EFC) after January 17, 2014 for assistance through either the Clean Water State Revolving Fund (CWSRF) or the Drinking Water State Revolving Fund (DWSRF), and
- Did not have the project plans and specifications submitted for review by a NYS agency on or before January 17, 2014 and approved by a NYS agency before April 15, 2014.

The following activities must be implemented by each Service Provider on an SRF funded project in order to maintain compliance with the AIS program. These contractual obligations are included in the contract language in Part 1: Required Contract Language and expanded upon below.

A. DEFINITIONS

It is required that all of the iron and steel products used in the project are produced in the United States. The term "**iron and steel products**" means the following products made primarily of iron or steel that is permanently incorporated into the public water system or treatment works:

Lined or unlined pipes or fittings
Manhole Covers
Municipal Castings (defined below);
Hydrants
Tanks
Flanges
Pipe clamps and restraints
Valves
Structural steel
Reinforced precast concrete
Construction materials (defined below)

For one of the listed products to be considered subject to the AIS requirement, it must be made of greater than 50% iron and steel, measured by material cost.

Municipal castings – cast iron or steel infrastructure products that are melted and cast. They typically provide access, protection, or housing for components incorporated into utility owned drinking water, storm water, wastewater, and surface infrastructure. They are typically made of grey or ductile iron, or steel. Examples of municipal castings are:

Access Hatches
Ballast Screen
Benches (Iron or Steel)
Bollards
Cast Bases
Cast Iron Hinged Hatches
Cast Iron Riser Rings
Catch Basin Inlet
Cleanout/Monument Boxes
Construction Covers and Frames
Curb and Corner Guards
Curb Openings
Detectable Warning Plates
Downspout Shoes (Boot, Inlet)
Drainage Grates, Frames and Curb
Inlets
Inlets
Junction Boxes
Lampposts
Manhole Covers, Rings and Frames, Risers
Meter Boxes
Service Boxes
Steel Hinged Hatches
Square and Rectangular Steel Riser Rings
Trash receptacles
Tree Grates
Tree Guards
Trench Grates

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Valve Boxes, Covers and Risers

Construction Materials – articles, materials, or supplies made primarily of iron and steel that are permanently incorporated into the project, not including mechanical and/or electrical components, equipment and systems. Some of these products may overlap with what is also considered "structural steel". This includes, but is not limited to, the following products:

Wire rod
Bar
Angle
Concrete
Reinforcing bar
Wire
Wire cloth
Wire rope and Cables
Tubing
Framing
Joists
Trusses

Fasteners (i.e., nuts and bolts)
Welding rods
Decking
Grating
Railings
Stairs
Access ramps
Fire escapes
Ladders
Wall panels
Dome structures

Roofing
Ductwork
Surface drains
Cable hanging systems
Manhole steps
Fencing and fence tubing
Guardrails
Doors
Stationary screens

NOT Considered Construction Materials: Mechanical and electrical components, equipment and systems are not considered construction materials. Mechanical equipment is typically that which has motorized parts and/or is powered by a motor. Electrical equipment is typically any machine powered by electricity and includes components that are part of the electrical distribution system.

The following examples (including their appurtenances necessary for their intended use and operation) are NOT considered construction materials:

Pumps
Motors
Gear reducers
Drives (including variable frequency drives (VFDs))
Electric/pneumatic/manual accessories used to operate valves (such as electric valve actuators),
Mixers
Gates
Motorized screens (such as traveling screens)
Blowers/aeration equipment
Compressors
Meters
Sensors
Controls and switches
SCADA
Metal office furniture
Shelving
Laboratory equipment
Analytical instrumentation
Dewatering equipment

Membrane bioreactor systems
Membrane filtration systems
Filters
Clarifiers and clarifier mechanisms
Rakes
Grinders
Disinfection systems
Presses (including belt presses)
Conveyors, cranes
HVAC (excluding ductwork)
Water heaters
Heat exchangers
Generators
Cabinetry and housings (such as electrical boxes/enclosures)
Lighting fixtures
Electrical conduit
Emergency life systems

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B. CERTIFICATION

Each Service Provider that has a contract with the Recipient shall provide to the Recipient an executed certification on the form provided, that the iron and steel products and/or materials used on this project are in full compliance with the American Iron and Steel requirements in accordance with the provisions of the Consolidated Appropriations Act, and to maintain such certification for their own records.

It is recommended that a step certification process is used, in which each handler (supplier, fabricator, manufacturer, processor, etc) of the iron and steel products certifies that their step in the process was domestically performed. Each time a step in the manufacturing process takes place, the manufacturer delivers its work along with a certification of its origin.

A certification typically includes:

a. the name of the manufacturer

b. the location of the manufacturing facility where the product or process took place (not its headquarters)

c. a description of the product or item being delivered

d. a signature by a manufacturer's responsible party

These certifications should be collected and maintained by Recipients.

Alternatively, the final manufacturer that delivers the iron or steel product to the worksite, vendor, or Service Provider, may provide a certification asserting that all manufacturing processes occurred in the US. While this type of certification may be acceptable, it may not provide the same degree of assurance. Additional documentation may be needed if the certification is lacking important information.

C. WAIVER REQUESTS

The EPA is allowed to issue waivers from the AIS requirements when:

- The application of the AIS requirements would be inconsistent with the public interest;
- Iron and steel products are not produced in the US in sufficient and reasonably available quantities and of a satisfactory quality; or
- Inclusion of iron and steel products produced in the US will increase the cost of the overall project by more than 25 percent.

AIS waivers can be product-specific, project-specific, regional, or nationwide. Waiver requests can only be submitted by either EFC or DOH to EPA, and only EPA can approve an AIS waiver. If the Service Provider is considering requesting an AIS waiver, documentation as described in the EPA guidance should be developed and submitted to the EFC or DOH Project Engineer. See EFC's website for EPA guidance.

1. Waiver Documentation:

The Service Provider shall complete the waiver request to the Recipient along with adequate good faith effort documentation. Waiver requests should include the following information:

a. Description of the foreign and domestic construction materials
b. Unit of measure
c. Quantity
d. Price
e. Time of delivery or availability
f. Location of the construction project
g. Name and address of the proposed supplier

h. A detailed justification for the use of foreign construction materials

For **Cost Waiver Requests**, the Service Provider should compare the overall cost of the project with domestic iron and steel products to overall cost of the project with foreign iron and steel products. Relevant excerpts from the bid documents used by the Service Providers to complete the comparison, as well as supporting documentation indicating that the Service Providers made a reasonable survey of the market, such as a description of the process for identifying suppliers and a list of contacted suppliers may be used.

For **Availability Waiver Requests**, the request must include the following supporting documentation necessary to demonstrate the availability, quantity and/or quality of the materials for which the waiver is requested:

a. Supplier information or pricing information from a reasonable number of domestic suppliers indicating availability/delivery date for construction materials

b. Documentation of the assistance recipient's efforts to find available domestic sources, such as a description of the process for identifying suppliers and a list of contacted suppliers

c. Project schedule

d. Relevant excerpts from project plans, specifications, and permits indicating the required quantity and quality of construction materials

Availability Waiver Requests should include a statement from the prime Service Provider and/or supplier confirming the non-availability of the domestic construction materials for which the waiver is sought.

2. **Waiver Review:**

The Recipient and EFC will review each waiver request based on the criteria presented above and the documentation submitted with the waiver request. EFC will submit waiver request directly to EPA for final approval of submission. Granting a waiver is a three-step process:

a. Posting – After receiving an application for waiver of the AIS requirements, EPA will publish the request on its website for 15 days and receive informal comment.

b. Evaluation – EPA will review the application to determine whether the application properly and adequately documents and justifies the statutory basis cited for the waiver to make a determination.

c. Determination – In the event that EPA finds that adequate documentation and justification has been submitted, the EPA may grant a waiver to the Recipient. The Recipient should keep a copy of the signed waiver in its project files.

D. DE MINIMIS WAIVER

The AIS de minimis waiver allows that incidental iron and steel components that are tracked in a certain manner are exempt for the AIS requirements. Items that can be subject to the de minimis waiver must be:

1. Essential, but incidental to the construction
2. Incorporated into the physical structure of the project. and
3. Often are low cost and procured in bulk.

Examples items eligible for de minimis tracking include: washers, screws, nuts, bolts, fasteners, miscellaneous wire, corner bead, ancillary tubing, etc.

Examples of items that are NOT incidental and cannot be considered for de minimis tracking include: process fittings, tees, elbows, flanges, brackets, valves, sewer or water pipes for distribution, treatment or storage tanks, large structural support systems, etc.

To comply with the de minimis waiver, all items that are waived must meet the above criteria and must be 5% or less of the total cost of materials incorporated into the project. This can be measured on a project basis, or on a contract-by-contract basis, as long as the cost of the tracked de minimis iron and steel items is 5% or less of the total material cost of materials incorporated into the project.

Service Providers should prepare a record, in spreadsheet form, which tracks the cost of all materials incorporated into the project. This spreadsheet can be either project specific or contract specific. If contract specific, a material tracking record for each construction contract should be prepared and items that are subject to the AIS de minimis waiver highlighted. There should be a clear calculation available to indicate that the cost of the de minimis iron and steel items is 5% or less of the total cost of all materials.

E. INSPECTIONS

EFC or DOH can be expected to conduct occasional site inspections that will include a review of AIS documentation for the project. Items that will be reviewed during these inspections include:

1. AIS certifications from vendors, suppliers, or manufacturers;
2. Contract and subcontracts to verify that the AIS contractual language has been included; and
3. The lists of the incidental iron and steel project components that are claimed under the AIS de minimis waiver.

F. BEST PRACTICES

The following Best Practices are suggestions and recommendations for the Service Provider to remain in compliance with the AIS program. The EFC can be contacted directly with any questions regarding compliance.

1. The Service Provider should carefully review the plans and specifications prepared to identify iron and steel products (as defined previously in Section 5.A) used in each project and incorporate American-made iron and steel at the time of bid.
2. The Service Provider should acquire product certifications from all suppliers and manufacturers for iron and steel products verifying that the products used in the project are American-made. These certifications should be kept on file for the duration of the project and provided to the SRF Recipient.
3. The product/manufacturer certifications should be submitted with each equipment/material submittal to the Recipient and/or Engineer. The Service Provider should retain all delivery slips, certifications and approved submittals in their file for the duration of the project.

APPENDIX G

EEO PROGRAM CHECKLIST

The EEO program is required of all contracts.

The following forms must be completed and submitted to the Recipient. Refer to the applicable sections in the Guidance for further information.

At the Time of Bid:	**Guidance Reference**
☐ EEO Policy Statement	Section 1.B
☐ EEO Workforce Staffing Plan	Section 1.C
After Contract Award:	
☐ EEO Utilization Report	Section 1.D

APPENDIX G

MWBE and DBE PROGRAM CHECKLIST

Service Providers must comply with the MWBE program if "yes" is answered for ANY of the following questions. The DBE program is required of all contracts.

Yes	No	
☐	☐	The Service Provider contract greater than $25,000.
☐	☐	The initial Service Provider contract was $25,000 or less, but a subsequent change order increased the total contracted value over $25,000.
☐	☐	A contract amendment was approved that is greater than $25,000.
☐	☐	A partial or full waiver was not approved by the EFC.

If you answered YES to any of the above, then the following MWBE forms must be completed and submitted to the Recipient. The DBE forms are required of all contracts that are bid. Refer to the applicable sections in the Guidance for further information.

At the Time of Bid:	Guidance Reference
☐ EPA Form 6100-3: "DBE Subcontractor Performance Form"	Section 2.D
☐ EPA Form 6100-4: "DBE Subcontractor Utilization Form"	Section 2.D
Prior to Contract Award	
☐ EPA Form 6100-2: "DBE Subcontractor Participation Form"	Section 2.D
After Contract Award	
☐ MWBE Utilization Plan and/or Waiver Request and any revisions subsequent to approval	Section 2.D.1
☐ Good Faith Effort Documentation (if submitting a waiver)	Section 2.D.2
☐ All executed subcontracts, agreements and purchase orders	Section 2.D.3
☐ Proof of payment to MWBE firms	Section 2.D.4
☐ Monthly MWBE Reports	Section 2.D.4

APPENDIX G

AMERICAN IRON AND STEEL (AIS) REQUIREMENTS CHECKLIST

Service Providers must comply with the AIS program if "yes" is answered for ALL of the following questions.

Yes	No	
☐	☐	As part of your scope of services you are supplying the Recipient with construction materials or equipment to be installed as part of this project.
☐	☐	This project involves the construction, alteration, maintenance, or repair of a public water system (DWSRF) or treatment works (CWSRF). Examples of treatment works include but are not limited to collection systems, pump stations, and wastewater treatment plants (see Definitions).
☐	☐	A financing assistance agreement with the NYS Environmental Facilities Corporation (EFC) was executed after January 17, 2014 for assistance through either the Clean Water State Revolving Fund (CWSRF) or the Drinking Water State Revolving Fund (DWSRF).
☐	☐	The project did not have the project plans and specifications submitted for review by a NYS agency on or before January 17, 2014 and approved by a NYS agency before April 15, 2014.

If you answered YES to all of the above, then the following forms must be completed and submitted to the Recipient. Refer to the applicable sections in the Guidance for further information.

After Contract Award		**Guidance Reference**
☐	AIS Compliance Certifications for all applicable iron and steel products	Section 4.B

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PART 3:

REQUIRED FORMS

FOR NON-CONSTRUCTION CONTRACTS

APPENDIX G

All required forms can be found on the EFC website (www.efc.ny.gov)

The following SRF forms are provided and may be required. Please refer to the Guidance Section Checklists to determine which forms are applicable to your project.

	Guidance Reference
☐ EEO Policy Statement	Section 1.B
☐ EEO Staffing Plan (form available online only)	Section 1.C
☐ EEO Workforce Utilization Report (form available online only)	Section 1.D
☐ MWBE Utilization Plan and/or Waiver Request (form available online only)	Section 2.D.1
☐ MWBE Monthly Report Form (form available online only)	Section 2.D.4
☐ EPA Form 6100-2 "DBE Subcontractor Participation Form"	Section 2.D
☐ EPA Form 6100-3 "DBE Subcontractor Performance Form"	Section 2.D
☐ EPA Form 6100-4 "DBE Subcontractor Utilization Form"	Section 2.D
☐ Lobbying Certification (Certification for Contracts, Grants, Loans, and Cooperative Agreements 40 CFR Part 34)	Section 3

APPENDIX G

AGREEMENT TO ABIDE BY EQUAL EMPLOYMENT OPPORTUNITY POLICY STATEMENT REQUIREMENTS
NEW YORK STATE REVOLVING FUND (SRF)

I, _____, am the authorized representative of _____.
Name of Representative — Name of Contractor/Service Provider

I hereby certify that _____ will abide by the equal employment opportunity (EEO) policy statement provisions outlined below.
Name of Contractor/Service Provider

(i) A statement that the contractor will not discriminate on the basis of race, creed, color, national origin, sex, age, disability, or marital status against any employee or applicant for employment, will undertake or continue existing programs of affirmative action to ensure that minority group members and women are afforded equal employment opportunities without discrimination and will make and document its conscientious and active efforts to employ and utilize minority group members and women in its work force on contracts relating to the Project.

(ii) An agreement that all of contractor's solicitations or advertisements for employees will state that, in the performance of the contract relating to this Project, all qualified applicants will be afforded equal employment opportunities without discrimination on the basis of race, creed, color, national origin, sex, age, disability or marital status.

(iii) An agreement to request each employment agency, labor union, or authorized representative of workers with which it has a collective bargaining or other agreement or understanding, to furnish a written statement that such employment agency, labor union, or representative will not discriminate on the basis of race, creed, color, national origin, sex, age, disability or marital status and that such union or representative will affirmatively cooperate in the implementation of the contractor's obligations herein.

(iv) An agreement to comply with the provisions of the Human Rights Law (Article 15 of the Executive Law), including those relating to non-discrimination on the basis of prior criminal conviction and prior arrest, and with all other State and federal statutory constitutional non-discrimination provisions.

Blank EEO Policy Statements are available at www.efc.ny.gov/mwbe, if needed.

If contractor fails to submit to Recipient an EEO policy statement consistent with the provisions set forth above in clauses (i), (ii), (iii) and (iv) and within the timeframe required thereof, Recipient may declare this contract to be null and void.

X _____

Contractor/Service Provider Representative

Once completed, please provide to the Prime Contractor and/or the community MBO

APPENDIX G

United States Environmental Protection Agency

OMB Control No: 2090-0030
Approved: 8/13/2013
Approval Expires: 8/31/2015

Disadvantaged Business Enterprise (DBE) Program
DBE Subcontractor Participation Form

An EPA Financial Assistance Agreement Recipient must require its prime contractors to provide this form to its DBE subcontractors. This form gives a DBE[1] subcontractor[2] the opportunity to describe work received and/or report any concerns regarding the EPA-funded project (e.g., in areas such as termination by prime contractor, late payments, etc.). The DBE subcontractor can, as an option, complete and submit this form to the EPA DBE Coordinator at any time during the project period of performance.

Subcontractor Name	Project Name	
Bid/ Proposal No.	Assistance Agreement ID No. (if known)	Point of Contact
Address		
Telephone No.	Email Address	
Prime Contractor Name	Issuing/Funding Entity:	

Contract Item Number	Description of Work Received from the Prime Contractor Involving Construction, Services , Equipment or Supplies	Amount Received by Prime Contractor

[1] A DBE is a Disadvantaged, Minority, or Woman Business Enterprise that has been certified by an entity from which EPA accepts certifications as described in 40 CFR 33.204-33.205 or certified by EPA. EPA accepts certifications from entities that meet or exceed EPA certification standards as described in 40 CFR 33.202.

[2] Subcontractor is defined as a company, firm, joint venture, or individual who enters into an agreement with a contractor to provide services pursuant to an EPA award of financial assistance.

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United States Environmental Protection Agency

OMB Control No: 2090-0030
Approved: 8/13/2013
Approval Expires: 8/31/2015

Disadvantaged Business Enterprise (DBE) Program
DBE Subcontractor Participation Form

Please use the space below to report any concerns regarding the above EPA-funded project:

Subcontractor Signature	Print Name
Title	**Date**

The public reporting and recordkeeping burden for this collection of information is estimated to average three (3) hours per response. Send comments on the Agency's need for this information, the accuracy of the provided burden estimates, and any suggested methods for minimizing respondent burden, including through the use of automated collection techniques to the Director, Collection Strategies Division, U.S. Environmental Protection Agency (2822T), 1200 Pennsylvania Ave., NW, Washington, D.C. 20460. Include the OMB control number in any correspondence. Do not send the completed form to this address.

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United States Environmental Protection Agency

OMB Control No: 2090-0030
Approved: 8/13/2013
Approval Expires: 8/31/2015

Disadvantaged Business Enterprise (DBE) Program
DBE Subcontractor Performance Form

This form is intended to capture the DBE[1] subcontractor's[2] description of work to be performed and the price of the work submitted to the prime contractor. An EPA Financial Assistance Agreement Recipient must require its prime contractor to have its DBE subcontractors complete this form and include all completed forms in the prime contractors bid or proposal package.

Subcontractor Name	Project Name	
Bid/ Proposal No.	Assistance Agreement ID No. (if known)	Point of Contact
Address		
Telephone No.	Email Address	
Prime Contractor Name	Issuing/Funding Entity:	

Contract Item Number	Description of Work Submitted to the Prime Contractor Involving Construction, Services, Equipment or Supplies	Price of Work Submitted to the Prime Contractor

DBE Certified By: ___ DOT ___ SBA ___ Other: _____	Meets/ exceeds EPA certification standards? ___ YES ___ NO ___ Unknown

[1] A DBE is a Disadvantaged, Minority, or Woman Business Enterprise that has been certified by an entity from which EPA accepts certifications as described in 40 CFR 33.204-33.205 or certified by EPA. EPA accepts certifications from entities that meet or exceed EPA certification standards as described in 40 CFR 33.202.

[2] Subcontractor is defined as a company, firm, joint venture, or individual who enters into an agreement with a contractor to provide services pursuant to an EPA award of financial assistance.

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Approved: 8/13/2013
Approval Expires: 8/31/2015

Disadvantaged Business Enterprise (DBE) Program
DBE Subcontractor Performance Form

I certify under penalty of perjury that the forgoing statements are true and correct. Signing this form does not signify a commitment to utilize the subcontractors above. I am aware of that in the event of a replacement of a subcontractor, I will adhere to the replacement requirements set forth in 40 CFR Part 33 Section 33.302 (c).

Prime Contractor Signature	Print Name
Title	**Date**

Subcontractor Signature	Print Name
Title	**Date**

The public reporting and recordkeeping burden for this collection of information is estimated to average three (3) hours per response. Send comments on the Agency's need for this information, the accuracy of the provided burden estimates, and any suggested methods for minimizing respondent burden, including through the use of automated collection techniques to the Director, Collection Strategies Division, U.S. Environmental Protection Agency (2822T), 1200 Pennsylvania Ave., NW, Washington, D.C. 20460. Include the OMB control number in any correspondence. Do not send the completed form to this address.

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United States Environmental Protection Agency

OMB Control No: 2090-0030
Approved: 8/13/2013
Approval Expires: 8/31/2015

Disadvantaged Business Enterprise (DBE) Program
DBE Subcontractor Utilization Form

This form is intended to capture the prime contractor's actual and/or anticipated use of identified certified DBE[1] subcontractors[2] and the estimated dollar amount of each subcontract. An EPA Financial Assistance Agreement Recipient must require its prime contractors to complete this form and include it in the bid or proposal package. Prime contractors should also maintain a copy of this form on file.

Prime Contractor Name		Project Name
Bid/ Proposal No.	Assistance Agreement ID No. (if known)	Point of Contact
Address		
Telephone No.		Email Address
Issuing/Funding Entity:		

I have identified potential DBE certified subcontractors	___ YES	___ NO
If yes, please complete the table below. If no, please explain:		

Subcontractor Name/ Company Name	Company Address/ Phone/ Email	Est. Dollar Amt	Currently DBE Certified?

Continue on back if needed

[1] A DBE is a Disadvantaged, Minority, or Woman Business Enterprise that has been certified by an entity from which EPA accepts certifications as described in 40 CFR 33.204-33.205 or certified by EPA. EPA accepts certifications from entities that meet or exceed EPA certification standards as described in 40 CFR 33.202.

[2] Subcontractor is defined as a company, firm, joint venture, or individual who enters into an agreement with a contractor to provide services pursuant to an EPA award of financial assistance.

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Prime Contractor Signature	Print Name
Title	**Date**

The public reporting and recordkeeping burden for this collection of information is estimated to average three (3) hours per response. Send comments on the Agency's need for this information, the accuracy of the provided burden estimates, and any suggested methods for minimizing respondent burden, including through the use of automated collection techniques to the Director, Collection Strategies Division, U.S. Environmental Protection Agency (2822T), 1200 Pennsylvania Ave., NW, Washington, D.C. 20460. Include the OMB control number in any correspondence. Do not send the completed form to this address.

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CERTIFICATION FOR CONTRACTS, GRANTS, LOANS, AND COOPERATIVE AGREEMENTS (LOBBYING CERTIFICATION) 40 CFR 34

Name of Municipality: _____
SRF Project No.: _____
Contractor: _____

The undersigned each certify, to the best of his or her knowledge and belief, that:

(1) No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.

(2) If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.

(3) The undersigned shall require that the language of this certification be included in the award documents for all sub-awards at all tiers (including sub-contracts, sub-grants, and contracts under grant, loans, and cooperative agreements) and that all sub-recipients shall certify and disclose accordingly.

This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by section 1352, title 31 U.S. Code. Any person who fails to file the required certification shall be subject to a civil penalty of not less than $10,000 and not more than $100,000 for each such failure.

Signature: _____

Name: _____

Title: _____

Date: _____

Contract ID: _____

SRF Program Decision Tree

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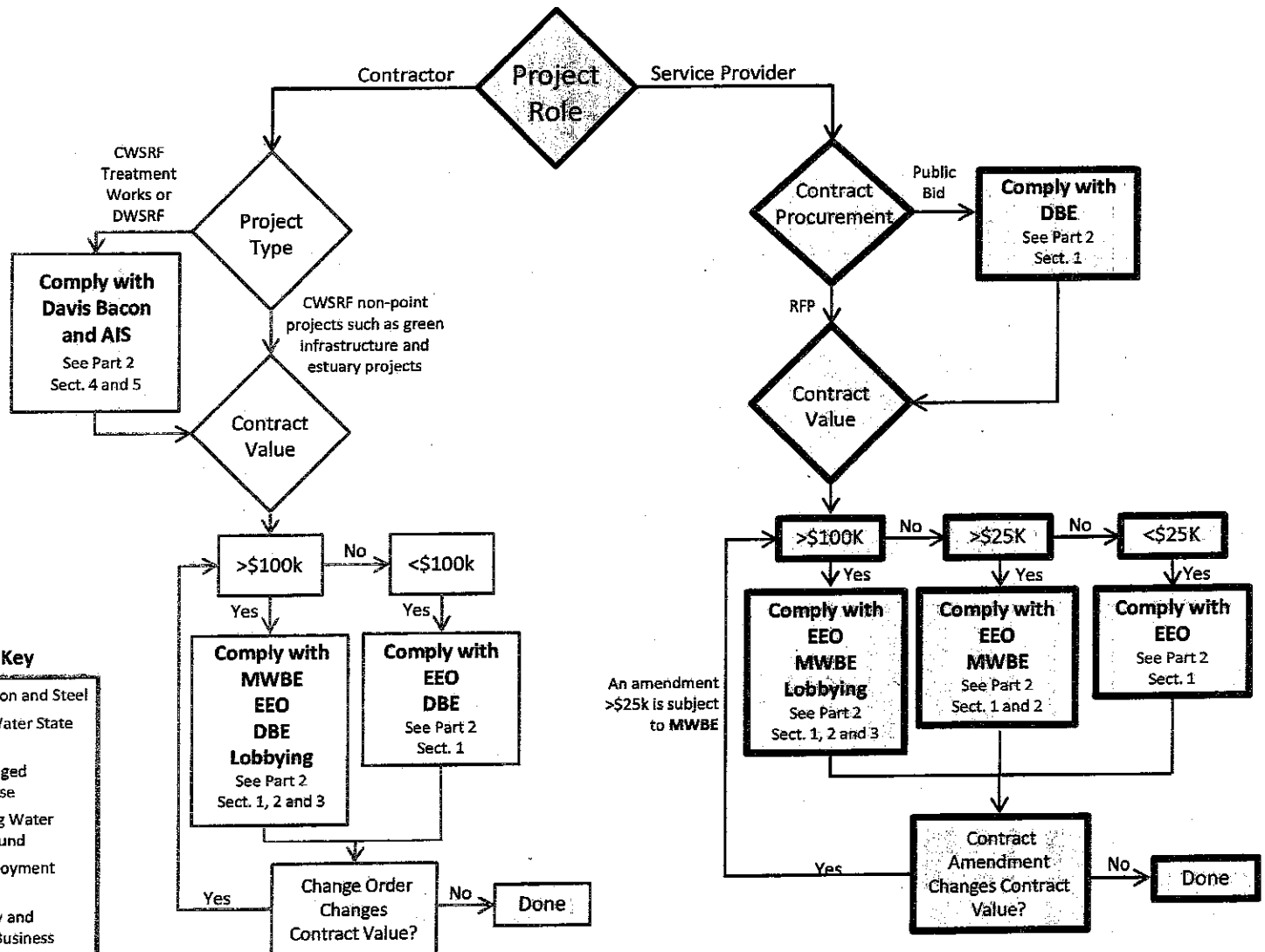

Acronym Key

- **AIS** – American Iron and Steel
- **CWSRF** – Clean Water State Revolving Fund
- **DBE** – Disadvantaged Business Enterprise
- **DWSRF** – Drinking Water State Revolving Fund
- **EEO** – Equal Employment Opportunity
- **MWBE** – Minority and Women-Owned Business Enterprise
- **RFP** – Request for Proposal